

The Basis of Social Relations

A Study in Ethnic Psychology

BY

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EDITOR'S PREFACE

THE manuscript of the following work was left by Dr. Brinton at his death in 1899 in a state of approximate completion, lacking only final revision at his hands. The editor has contented himself, therefore, with making such verbal corrections as were necessary and, by slight rearrangement of certain sections to conform to the obvious scheme of the work, bringing the text into readiness for publication. The verification and noting of references have not been attempted. The author's encyclopedic acquaintance with the literature of his subject as well as his general method of quotation has made this impracticable.

Dr. Brinton's contributions to anthropology are too well known to call for especial comment, his writings, particularly in the fields of American archæology and linguistics, being so numerous and valuable as to give him a world-wide reputation. His interest, however, was general as well as special, and the development of anthropology owes much to his insight and ready pen. Among the doctrines for which he stood at all

times an active champion was the psychological unity of man, a principle which is now widely accepted and forms the working basis for most of our modern ethnology. Tacitly assumed, as it is and has been, for the most part since the writings of Waitz, the need of a succinct statement of the doctrine has long been felt, and this is now given, possibly in somewhat extreme form, in the present work.

Apart from its intrinsic interest the book will be welcomed as the last word of the distinguished author whose lamented death has deprived the science of anthropology of one of its ablest representatives.

L. F.

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INTRODUCTION

IT is strange that not in any language has there been published a systematic treatise on Ethnic Psychology ; strange, because the theme is in no-wise a new one but has been the subject of many papers and discussions for a generation ; indeed, had a journal dedicated to its service for a score of years ; strange, also, because its students claim that it is the key to ethnology, the sure interpreter of history, and the only solid basis for constructive sociology.

Why this apparent failure to establish for itself a position in the temple of the Science of Man ? This inquiry must be answered on the threshold of a treatise which undertakes to vindicate for this study an independent position and a permanent value.

It has been cultivated chiefly by German writers. The periodical to which I have referred was begun in 1860, under the editorship of Dr. M. Lazarus and Dr. H. Steinthal, the former a psychologist, the latter a logician and linguist. The contributors to it often occupied high places in the learned world. Their

articles, usually on special points in ethnography or linguistics, were replete with thought and facts. But they failed to convince their contemporaries that there was any room in the hierarchy of the sciences for this newcomer. The failure was so palpable that after twenty years' struggle the editors abandoned their task. But the seed they sowed had not perished in the soil. Under other names it struck root and flourished, and is now asserting for itself a right to live by virtue of its real worth to the right understanding of human progress.

Why, then, this failure of its earlier cultivation ?

To some extent, but not in full, the answer to this may be found in a critique of the spirit and method of the writers mentioned, offered by one of the most eminent psychologists of our generation, Professor W. Wundt.

With partial justice, he pointed out that these teachers proceeded on a false route in their effort to establish the principles of an ethnic psychology. They approached it imbued with metaphysical ingenuities, they indulged too much in talk of "soul," and they searched for "laws"; whereas, modern psychology recognises only "psychic processes," and is not willing to consider that any "soul-constitution" enters to modify of its own force the progress of the race. Wundt also asserted that the field of ethnic

psychology is already mainly occupied by general ethnology, or else by the philosophy of history. Yet he did not deny that in a sphere strictly limited to the subjects of language, custom, and myth such a "discipline" might do useful work.

In his later writings, however, Wundt seems to have modified these strictures, and in the last edition of his excellent text-book acknowledges that there is no antagonism between experimental and ethnic psychology, as has been sometimes supposed; that they do not occupy different, but parts of the same fields, and are distinguished mainly by difference of method, the one resting on experiment, the other on observation.

The recognition of ethnic psychology by professed psychologists is, therefore, an accomplished fact; and this was long since anticipated by the general literature of history and ethnography.

Who, for instance, has denied that there is such a thing as "racial" or "national" character? Did anyone take it into his head to denounce as meaningless Emerson's title, *English Traits*? Does not every treatise on ethnography assume that there are certain psychical characteristics of races, tribes, and peoples, quite sharply dividing them from their neighbours?

Take, for instance, Letourneau's popular work, and we find him expressly claiming that the races and

subraces of mankind can be classified by the relative development of their psychical powers; and such a "psychological" classification is not a novelty in anthropology.

These mental traits, characteristics, differences, between human groups are precisely the material which ethnic psychology takes as its material for investigations. Its aim is to define them clearly, to explain their origin and growth, and to set forth what influence they assert on a people and on its neighbours.

Ethnic psychology does not hesitate to claim that the separation of mankind into groups by psychical differences was and is the one necessary condition of human progress everywhere and at all times; and, therefore, that the study of the causes of these differences, and the influence they exerted in the direction of evolution or regression, is the most essential of all studies to the present and future welfare of humanity.

In this sense, it is not only the guiding thread in historical research, but it is immediately and intensely practical, full of application to the social life and political measures of the day.

Some have jealously feared that it offers itself as a substitute for the philosophy of history. True that it draws some of its material from history; but as much from ethnography and geography. Moreover, it is not, as history, a chronologic, but essentially a

natural science, depending for its results on objective, verifiable facts, not on records and documents.

To allege that this field is already occupied is wide of the mark. It is no more embraced in general ethnology or in history than experimental psychology is included in general physiology. The advancement of science depends on the specialisation of its fields of research, and it is high time that ethnic psychology should take an independent position of its own.

To assist towards this I shall aim in the present work to set forth its method and its aims as I understand them. In both these directions I offer schemes notably different from those of the authors I have mentioned, believing that this science requires for its independent development much more comprehensive outlines than will be found in their writings.

The method, it need hardly be said, must be that of the so-called "natural sciences"; but it must be based, as Wundt remarks, not on experiment—that were impossible—but on observation. This is to extend, not, as he argued, to a few products of culture, but to everything which makes up national or ethnic life, be it an historic event, an object of art, a law, custom, rite, myth, or mode of expression. The origins of these, in the sense of their proximate or exciting causes, are to be sought, and the conditions of their growth and decay deduced from their histories.

We are dealing with facts of Life, with collective mental function in action, and we can appeal, therefore, to the principles of general biology to guide us. We can, for example, since every organism bears in its structure not only the record of its own life-history but the vestiges of its ancestry, confidently expect to find in the traits of nations the survivals of their earlier and unrecorded conditions.

Understood in this sense, ethnic psychology does not deal with mathematics and physics, but with collections of facts, feelings, thoughts, and historic events, and seeks by comparison and analysis to discover their causal relations. It is wholly objective, and for that reason eminently a "natural" science. The objective truths with which it deals are not primary but secondary mental products, as they are not attached to the individual but to the group. For this reason it has an advantage over other natural sciences in that it can with propriety search not only into growth but into origins, for, in its purview, these fall within the domain of known facts.

We must recognise that the psychical expressions of life are absolutely and always correlated to the physical functions and structure; and that, therefore, no purely psychical causes can explain ethnic development or degeneration. As the past of an organism

false and the other true, their psychic values are indefinitely apart.

We perceive, therefore, that in psychology generally, and especially in ethnic psychology, where we deal with aggregates, we must draw a fundamental distinction between those agents which act quantitatively on the psychical life, that is, modify it by measurable forces, and those which act qualitatively, that is, by altering the contents and direction of the *psyche* itself.

The former belong properly to "natural history," and can be measured and estimated just to the extent that we have instruments of precision for the purpose; the latter wholly elude any such attempts, and must be appraised by the results they have historically achieved, that is, by arts, events, or institutions.

The recognition of these two factors of human development, radically distinct yet inseparably associated, has led me to adopt the division into two parts of the present work. The first is the "natural," the second, the "cultural," history of the ethnic mind.¹

Note that I say *ethnic* mind. For let it be said here, as well as repeated later, that there is no such

¹[The author had apparently decided to reverse this order of treatment after writing the above. The "natural history of the ethnic mind" forms the second part of the work.—EDITOR.]

decides its future, so the future of a people is already written in its past history.

As in ethnic psychology the material is different from that in experimental psychology, so in the former we must abandon the methods suitable in the latter. The ethnic *psyche* is made up of a number of experiences common to the mass, but not occurring in any one of its individual members. These experiences of the aggregate develop their own variations and modes of progress, and must be studied for themselves, without reference to the individual, holding the processes of the single mind as analogies only.

While fully acknowledging the inseparable correlation between all psychical activities and the physical structures which condition them, let us not fall into the common and gross error of supposing that physical is in any way a measure of psychical function. All measurements in experimental psychology, be they by chemistry or physics, are quantitative only, and can be nothing else (Wundt); whereas psychical comparisons are purely qualitative.

A single example will illustrate this infinitely important fact:—precisely the same quantity of physico-chemical change may be needed for the evolution into consciousness of two ideas; but if the one is

thing as progress or culture in the isolated individual, but only in the group, in society, in the *ethnos*. Only by taking and giving, borrowing and lending, can life either improve or continue.

The "natural" history will embrace the consideration of those general doctrines of continuity and variation which hold true alike in matter and in mind, in the soul as in the body, and a review of the known forces which, acting through the physical structure and function upon the organs which are the vehicles of mental phenomena, weaken or strengthen the psychical activities.

The "cultural" history will present something of a new departure in anthropology—a classification of all ethnologic data as the products of a few general concepts, universal to the human mind, but conditioned in their expressions by the natural history of each group. The justification of this procedure, which is *not* a return to the ideology of an older generation, will be presented in the introduction to the second part.

The illustrative examples I shall frequently draw from savage conditions of life. This is in accordance with the custom of ethnologists, and is based on the fact that in such conditions the motives of action are simpler and less concealed, and we are nearer the origins of arts and institutions.

Only by such direct examples can a true psychology be established. The time has passed when one can seek the laws of mental development from the “inner consciousness”; and we smile at even so recent a philosopher as Cousin, when he tells us that, to discover such laws, “*il nous suffit de rentrer dans nous-mêmes.*”

PART I

THE CULTURAL HISTORY OF THE ETHNIC MIND

CHAPTER I

THE UNITY OF THE HUMAN MIND

IN a treatise on psychology we have to do with the Mind; and what is Mind? So far as we can define it, it is the sum of those activities which distinguish living from dead matter, the organism from the inorganic mass.

So broad a definition would include both the vegetable and the animal worlds; and this is not an error; but for the present purpose, which is the consideration of the mind of man, it is enough if we recognise that this mind of his is a development of that of the brute; the same in most of its traits, contrasted to it in a few. It is profitable, in truth indispensable, to scrutinise both closely.

Identities and Differences of the Human and the Brute Mind.—There is a branch of science called “comparative psychology.” Its province is to trace the evolution of human mental powers to their earlier phases in the inferior animals. So successfully has it

been pursued that not a few of its teachers claim that there is nothing left as the private property of man in this connection ; that he has no powers or faculties which are peculiarly his own ; that all his endowments differ in degree only from those evinced by some one or other of the lower species.

The brute has his fine senses, as acute as, often acuter than, ours ; no one can deny him emotions of love and fear, hate and affection, sorrow and joy, as poignant as ours, and often expressed in strangely similar modes ; his memory is retentive, his will strong, his self-control remarkable ; he has a lively curiosity, a love of imitation, a sense of the beautiful, and it is acknowledged that we cannot deny him either imagination or reason. Mental progress is not unknown in the brute, and it is well to remember that it is not universal among men.

What, then, is man's proud prerogative ? What the gift which has given him the world and all that therein is ? The answer is in one word,—*ideation*. The last efforts of modern science can but paraphrase the words which the philosopher Locke penned nigh two centuries ago : "The having of general ideas is that which puts a perfect distinction between man and brute." The latest American writer on the subject merely repeats this when he phrases it "the ability to think in general terms by

using symbols (words) which summarise systems of association."

Let us avoid the metaphysical snares which have been spread around this simple statement. No matter about such words as "concepts," "notions," "apperceptions," "abstractions," and the like. Let us fix in mind the formula of Romanes : "Distinctively human faculty belongs with distinctively human ideation." This, the power to form general ideas,—which are necessarily abstract,—is the one prerogative which lifts man above brute. By it he can compare what he learns and thus develop an intellectual life for comparison ; to borrow the metaphor of a famous student of his kind, it is the magic wand, the diamond-hilted sword, by which man will conquer his salvation through learning the truth. We exclaim, with Pascal, "It is Thought which makes Man."

Outside of this and its developments, all that man has of soul-life is in common with the brute. Why should he be ashamed of it ? What folly to pretend, as the common phrase goes, to "get rid of the brute in man" ! Parental love, social instincts, fidelity, friendship, courage,—these are parts of his heritage from his four-footed ancestor. What would he become, dispossessed of them ?

Already, in that long alienation from his brethren which made man the one species of his genus and the

one genus of his class, has he lost certain strange powers of mind which excite our special wonder when we see their manifestations in his remote relations. The chief of these is Instinct. We are all familiar with its extraordinary exhibitions in bees, ants, and higher animals, and its seeming total absence in ourselves. What can we make of it?

Instinct and Intelligence.—Throughout all nature there is an unceasing eternal conflict between the old and the new, between motion and rest, between the fixed and the variable, between the individual and the universe. This cosmic contest is reflected within the realm of animal life in the contrast between Instinct and Intelligence.

Instinct is hereditary ; it belongs to the species ; its performance is unconscious, resulting from internal impulse ; its tendency is endless repetition, not improvement ; it is petrified, inherited habit. Intelligence belongs to the individual ; it is neither inherited nor transmissible by blood ; its tendency is toward advancement, progress. It is the source of all knowledge not purely empirical, and of all development not of chance.

Habits which are forced upon organisms by the environment under penalty of extinction become hereditary modes of procedure. They are persisted in because vitally beneficial. Comparative anatomy

shows us that those organs and structures which are most persistent have their functions most instinctive ; and conversely, as individual freedom of action increases, instinct retires and intelligence takes its place, accompanied by higher plasticity in the structures involved in the action.

Intelligent action is personal initiative from compared experiences. It is not merely repetition, as in the tricks of animals, but deduction ; therefore it introduces new tendencies into life, which instinct never does ; and these tendencies are not the direct sequences of external stimuli, as are instincts, but are psychic in origin, proceeding from the mental conclusion reached.

No more interesting comparison between instinct and intelligence can be found than that offered by the social communities of the lower animals,—the bees, ants, beavers, and the like. Their well-regulated activities excite our surprise and admiration. Each member of the little state has his duty and performs it, with the result that all are thereby benefited and the species successfully perpetuated.

But much of the admiration expended on these societies in the lower life has been misplaced. Their perfect organisation is due to narrower development of mental powers. The one object at which they aim is species-continuation, and to this all else is subordinated. They are in no sense comparable to the

reflective purpose which is at the base of human society, whose real, though oft unacknowledged, and ever unsuccessful, aim is to insure to each individual the full development of his various powers. Hence it is that human society is and must be ever changing with individual aspirations, and can never be iron-bound in one form.

Imagination.—There is another faculty of mind, which, if not exclusively human, is so in all its higher manifestations, and indeed is, in its development, perhaps the best mental criterion we could select to measure the evolution of races, nations, and individuals. I refer to Imagination, Fancy, the source of our noblest enthusiasms, of our loftiest sentiments, of poetic rapture, and artistic inspiration. These spiritual sentiments are wholly absent in the brute, and are rare in inferior personalities. They arise from the vivid presentation to the mind of real or fancied experiences directed to some end in view. But this is just the definition of active imagination. It is a rehearsal of our perceptions, real, or those analogous to reality. Though not a collation of ideas, its processes are closely akin to those of logical thought; and, as an eminent analyst says, "The principle of an organic division according to an end in view governs all processes of active imagination."

In this phrase we see why imagination ranks as a criterion of mental development. Ruled chiefly by unconscious instinct the brute has no other aims than to feed and sleep and reproduce his kind; men of low degree add to these, perhaps, the lust of power or of gold or of amusement, or other such vain and paltry ambitions; but the soul that seeks the highest has aims beyond all fulfilment, but which by their glory stimulate its activities to the utmost and lift it into a life above all mundane satisfactions.

The Ideal.—By the plastic power of the active imagination is formed the Ideal, the most potent of all the stimulants of the higher culture. Based on reality and experience, it transcends the possibilities of both, and lifts the soul into realms whose light is not on sea or land, and whose activities aim at results beyond any present power of human nature to achieve. But it is only by striving for that which is beyond reach that the utmost effort possible can be called forth.

The ideal, some ideal, is present in every human heart. It is the goal toward which each strives in seeking pleasure and in avoiding pain. Through the unity of the human mind, the same ideals, few in number, have directed the energies of men in all times and climes. Around them have concentrated the labours of nations, and as one or the other became more prominent, national character partook of its

inspiration, and national history fell under its sway. Constantly in the history of culture do we see such general devotion to an ideal lead groups toward or away from the avenue to progress and vitality.

Consciousness and Self-Consciousness.—Through ideation arises man's consciousness of himself as an independent personality. In its broadest sense, that of reaction to an external stimulus, consciousness is a property of all animals, perhaps of all organic tissues. Contractility and motility depend upon it. What it is, "in itself," we have no means of knowing; therefore it is safe to agree with Professor Cope in his negative opinion that it "is qualitatively comparable to nothing else."

In simpler forms of organic life it must be merely rudimentary; but in most animals it reaches what has been called the "projective" stage; that is, the animal is conscious of the existence of others, like or unlike himself, though he is not yet conscious of himself as a separate entity. This has been held to explain, psychologically, the "gregarious instincts" of many lower species.

As a result of the absence of general concepts, the brute does not contemplate himself as a single individual in contrast to the others of his species. He is unable to class these under a general term or thought. Hence *self-consciousness* belongs to man alone.

Attempting to define this trait, we may say that it is the perception of the unity and continuity of the individual's psychological activities. Just in proportion as this perception becomes clear, positive, sharply defined, does the individual become aware of his own life, his real existence, its laws, and its purposes.

Hence the study of this mental characteristic becomes of the highest importance in ethnology; for it has been well said (Post) that the growth or decay of individual self-consciousness is an unfailing measure of the growth or decay of States.

Physiologically, the sense of self, the Ego, is produced by outgoing discharges from the central nervous system which are felt. They may arise from external forces or from the internal source which we call Volition, or Will. In both cases the repetition of *feeling* them yields the notion of Personality.

It is instructive to note how differently races and nations have understood and still do understand this notion; instructive, because it has much to do with their characters and actions.

Naturally enough many have identified the *I* with the body, or with that portion of the body least destructible, the bones. For this reason, in Egypt, Peru, Teneriffe, and many other localities there was the practice of preserving the entire body by exsiccation or mummification, the belief being that, were

it destroyed, the personal existence of the decedent would also perish. In other lands the bones were carefully guarded in ossuaries or shrines, for in them the soul was held to abide.

Not less widely received was another opinion, that the self dwells in the name. The personal name was therefore conferred with ceremony, and frequently was not disclosed beyond the family. The individual could be injured through his name, his personality impaired by its misuse.

In higher conditions the Person is usually defined by attributes and environment, as sex, age, calling, property, and the like. Ask a man who he is, he will define himself "by name and standing."

Few reach the conception of abstract Individuality, apart from the above incidents of time and place; so that it is easy to see that self-consciousness is still in little more than an embryonic stage of development in humanity. It differs notably in races and stages of culture. Dr. Van Brero comments on the slight sense of personality among the Malayan islanders, and attributes to that their exemption from certain nervous diseases. Its morbid development in self-attention and Ego-mania is frequently noticed in the asylums of highly civilised centres.

I shall have frequent occasion to insist that the utmost healthful, that is, symmetrical, development

of the individuality is the true aim of human society. This is directly due to the fact that self-consciousness, the "I" in its final analysis, depends on the unity and independence of the individual Will, which in a given moment of action can be One only. The cultivation of individuality is therefore the cultivation of the will, to direct and strengthen which must be the purpose of all education.

The Intellectual Process.—The chasm between the human and the brute mind widens when we come to look more closely at the various steps of the intellectual process, that is, at the method of reasoning. To be either clear or conscious, this must be carried on by general ideas, in themselves abstractions. For example, the so-called "syllogisms" of logic depend upon the relation of a general to a particular idea; and thinking can no more be conducted without this relation than talking without grammatical rules; though neither the formula of the syllogism nor the rules of grammar are consciously present to the mind.

The logical process is everywhere and at all times the same, in the sage or the savage, the sane or the insane. To reach any conclusion, the mind must work in accordance with its method. This is purely mechanical. An English philosopher (Jevons) invented a "logical machine," which worked as well as the human brain. The logical process has been

formulated by a mathematician (Boole) in a simple equation of the second degree. It must consist of subject and predicate, of general and particular. But the process has nothing to do with the proceeds. A mill grinds equally well wheat, tares, and poison-berries. Not upon the fact that the pepsin digests, but that it digests proper aliments, depends the health of the body. So the content of the intellectual operation, not its form, is of good or harm, and merits the attention of ethnographer or historian.

The Mechanical Action of Mind.—The Germans have a saying, framed first by their writer, Lichtenstein, known as "the Magician of the North," that "*we* do not think. Thinking merely goes on within us"; just as our stomachs digest and our glands excrete. Another one of their authors originated the once-celebrated apothegm, "Without phosphorus there is no thought."

The aim of both expressions is to put pointedly the principle that the intellectual process is of a mechano-chemical character, a mere bodily function, to be classed with digestion or circulation. This opinion has of late years been warmly espoused in the United States.

That intellectual actions are governed by fixed laws was long ago said and demonstrated by Quetelet in his remarkable studies of vital statistics. That the

development of thought proceeds "under the rule of an iron necessity" is the ripened conviction of that profound student of man, Bastian. We must accept it as the verdict of science.

What, then, becomes of individuality, personality, free-will? Must we, as the great dramatist said, "confess ourselves the slaves of chance, the flies of every wind that blows"?

Not yet. That we are subject to our surroundings and our history; that our forefathers, though dead, have not relaxed their parental grasp; that time, clime, and spot master thought and deed, is all true. But above all is Volition, Will, a final, insoluble, personal power, the one irrefragable proof of separate existence, not itself translatable into Force, but the director, initiator, of all vital forces.

The "Psychic Cells."—Mind brings man into kinship with all organic life. Long ago Aristotle said if one would explain the human soul, he must accomplish it through learning the souls of all other beings.

The physiologist explains mental phenomena as the function of specialised cell-life. He points out the cells, strange triangular masses in the cortex of the brain, with long processes and spiny branches, touching but never uniting. In the lower animals the network is simple, the branches short; as mental

capacity advances, they become more complex and longer.

These are the “psychic cells” in whose microscopic laboratory is worked the magic of mind, transforming waves of impact, some into sweet music, others into colour and light and all the glory of the landscape; changing sights and sounds into emotions of joy or dread; transmitting them into passions or lusts; assorting the gathered stores of comparison, and from them building ideas base or noble, and awaking the Will to direct the use of all.

The Question of Soul.—But, it will be exclaimed, in this discussion of Mind, is nothing to be said of a *Soul*? Has man not an immortal element which removes him infinitely from the brute which perishes, and which guarantees his personal existence after death?

The answer of modern science is that between “mind” and “soul” no distinction can be drawn; and that this very quality of “ideation” is not a sudden acquisition, some free gift of the gods, bestowed full-blown and perfected, but the development of a very slow process, traceable in its beginnings in some beasts, faint in the lowest men, strictly conditioned on the growth of articulate expression, far from complete in the ripest intellects. It neither excludes nor assumes persistence after corporeal

death. We may use the word "soul," therefore, because it is rich in associations; but use it as a synonym of "mind."

The soul is not some transcendental substance outside of the individual, but exists by virtue of the connection of his psychic processes with each other. This does not lessen the reality of his personal existence, but explains it.

As for the relation which mind or soul in general bears to the material external world, most thinkers are of opinion now that the contrast formerly supposed to exist is one merely of view-point; that natural science considers all our experiences as external, while mental science studies them as wholly internal.

Are the Mental Faculties the Same in Man Everywhere?—The lines thus clearly drawn between the human and the brute mind, we ask, do they hold good for the whole human species, of all races and degrees of culture? And has man in the past always possessed these faculties which have been thus attributed to him alone of all organised beings?

To these inquiries I shall address myself.

It is true, as I shall have many occasions to show hereafter, that in mental endowment tribes and races widely differ; but so do individuals of the same race, even of the same family; and in regard

to many of these differences we can so accurately put our finger on what brings it about that we have but to alter conditions in order to alter endowments.

The Fuegian savage is one of the worst specimens of the genus; but put him when young in an English school, and he will grow up an intelligent member of civilised society. However low man is, he can be instructed, improved, redeemed; and it is this most cheering fact which should encourage us in incessant labour for the degraded and the despised of humanity.

There is another proof, strong, convincing, of the substantial sameness of the human mind throughout the species. This is Language, articulate speech. No tribe has ever been known in history or ethnography but had a language ample for its needs. The speechless man, *Homo alalus*, is a fiction of a philosopher. He never lived.

Language, however, is the guarantor of thought in general terms. The words are the "associative symbols" of abstract ideas. Wherever men talk, they think in a solely human fashion.

Philologists talk of "higher" or "lower" languages. The assertion has been made that some more than others favor abstract expressions. Such statements may be granted; but the fact remains that every word

itself is the symbol of an abstraction, and only as such can it be rationally uttered.

We can trace language back to its pristine rudiments, to the form that it must have had among the hordes of the "old stone age," cave-dwellers, naked savages. I have made such an attempt. But the essentials of speech as a vehicle of thought still remain ; and though doubtless there was a period when articulate separated from inarticulate speech, that was during the morning twilight of man's day on earth, when he as yet scarcely merited the name of man.

From all analogy we may be confident that the early palæolithic men who shaped the symmetrical axes of Acheul, scrapers, punches, and hammers ; who carefully selected and tested the flint-flakes ; who had enough of an eye for beauty to preserve fine quartz pebbles ; and who lived in social groups, in stationary homes along watercourses,—these men unquestionably had a spoken language, and minds competent to deal in simple abstractions. Yet these are the most ancient men of whom we know anything, dwellers in central Europe before the Great Ice Age.

When we have such evidence as this for the psychical unity of the human species, is it worth while going into that antiquated discussion of the "monogenists" and "polygenists" as to whether man owns one or

several birthplaces? Surely not. We declare all nations of the earth to be of one blood by the judgment of a higher court than anatomy can furnish; though it also hands down no dissenting opinion.

The Elementary Ideas and their Development.—These two principles, or rather demonstrated truths,—the unity of the mind of man, and the substantial uniformity of its action under like conditions,—form the broad and secure foundation for Ethnic Psychology. They confirm the validity of its results and guarantee its methods.

As there are conditions which are universal, such as the structure and functions of the body, its general relations to its surroundings, its needs and powers, these developed everywhere at first the like psychical activities, or mental expressions. They constitute what Bastian has happily called the “elementary ideas” of our species. In all races, over all continents, they present themselves with a wonderful sameness, which led the older students of man to the fallacious supposition that they must have been borrowed from some common centre.

Nor are they easily obliterated under the stress of new experiences and changed conditions. With that tenacity of life which characterises simple and primitive forms, they persist through periods of divergent and higher culture, hiding under venerable beliefs,

emerging with fresh disguises, but easily detected as but repetitions of the dear primordial faiths of the race.

The Ethnic Ideas and their Origin.—From the monotonous unity of the elementary ideas, the common property of mankind in its earliest stages of development, branched off the mental life of each group and tribe, not discarding the old, but adding the new under the external compulsion of environment and experience.

Where such externals were alike or nearly so, the progress was parallel ; where unlike, it was divergent ; analogous in this to well-known doctrines of the biologist.

Such branches were constantly blending in peace or colliding in war, leading to a perpetual interaction of the one growth with the other, engendering a complexity of relation to each other and to the primitive substratum. But the ethnic character, once crystallised, remained as ingrained as the national life or the bodily stigmata. It compelled the members as a mass to look at life and its aims through certain lights, to comprehend the world under certain forms, to move to a measure, and dance to a tune.

Such is the power of the Ethnic Mind, fraught with weal or woe for the nation over whom it rules, tyrannical, portentous, a blind natural force, which

may lift its helpless followers to skyey heights or drag them into the abyss.

How it is formed and what decides its fateful beneficent or maleficent decrees, I shall consider in detail in the next chapters.

CHAPTER II

THE INDIVIDUAL AND THE GROUP. THE ETHNIC MIND

THE ethnic character becomes more fixed with advancing culture, and its component parts—that is, the individuals who compose it—more uniform. This has not been understood by one of the latest writers on the subject, Professor Vierkandt, who maintains that in savage groups there is a much greater sameness between the individuals who compose them. Superficially, this is true on account of the limited range of their activity; but in proportion to that range the individuals differ more widely, because they are so much more subjected to external influences and emotional attacks. Dr. Krejčí is more correct in his opinion that the sum of the differences between cultured individuals and peoples is less than that between the uncultured. This obviously flows from the fact that cultivated minds are governed by reason and knowledge, whose prescriptions are everywhere

the same ; while illiterate minds are victims of ignorance and passion. All who learn that twice two are four act on the knowledge of it ; but the Brazilian Indian, who has no word in his language for numerals above two, may disregard it.

Some have maintained that the promptings of the group-mind as felt by the individual belong in the unconscious or involuntary part of his nature, and partake of the character of mechanical necessity.

There is indeed this tendency, but it is not by any means a necessary character of the collective mind, as an example easily shows. I may adopt a prevailing custom or belief merely through imitation, which is a mechanical procedure ; or I may adopt it, being led to examine it from its prevalence and to approve it from my examination,—and this is a voluntary action.

In this we see the contrast of cultured and uncultured group-minds. The latter demand assent merely from their unanimity, the former wish it only from enlightenment ; the latter ask faith, the former knowledge ; the latter command obedience, the former urge investigation.

Plato has a dialogue on the problem of “The One and the Many” ; and the abstract subtleties he brings forward are almost paralleled by the concrete facts which we encounter in an endeavour to state the mutual relations of the Individual and the Group.

This science of ours, ethnic psychology, has, in one sense, nothing to do with the individual. It does not start from his mind or thoughts but from the mind of the group ; its laws are those of the group only, and in nowise true of the individual ; it omits wide tracts of activities which belong to the individual and embraces others in which he has no share ; to the extent that it does study him, it is solely in his relation to others, and not in the least for himself.

On the other hand, as the group is a generic concept only, it has no objective existence. It lives only in the individuals which compose it ; and only by studying them singly can we reach any fact or principle which is true of them in the aggregate.

Yet it is almost as correct to maintain that the group is that which alone of the two is real. The closer we study the individual, the more do his alleged individualities cease, as such, and disappear in the general laws by virtue of which society exists ; the less baggage does he prove to have which is really his own ; the more do all his thoughts, traits, and features turn out to be those of others ; so that, at last, he melts into the mass, and there is nothing left which he has a right to claim as his personal property. His pretended personal mind is the reflex of the group-minds around him, as his body is in every fibre and

cell the repetition of his species and race. As an American writer strongly puts it: "Morally I am as much a part of society as physically I am a part of the world's fauna."

But let no one deduce from this that the group is merely the sum total of the individuals which compose it, the net balance of their thoughts and lives. Nothing would be more erroneous. I have already said that laws and processes belong to the group which are foreign to the individual. We may go further, and prove that these processes, the spirit of the group, are quite different from those of any single member of it. To use the expression of Wundt: "The resultant arising from united psychological processes includes contents which are not present in the components."

In numerous respects, indeed, the individual and the group stand in opposition to each other. The qualities of the former are incoherent, disorderly, irregular; while those of the latter are fixed, stable, computable.

Let us contemplate further this relation of the individual to the group, for upon its correct apprehension must the whole fabric of ethnic psychology, as a science, rest.

In every healthy individual there is a feeling that his thoughts and actions are vain unless they

are somehow directed towards his fellow human beings; yet there is a further feeling that these fellow creatures are but a means for the developing and perfecting of himself. He desires to be intimately associated with the group, but not to be absorbed and lost in it. His unconscious goal is individuality, but not isolation; and he feels that the most complete and sane individuality can be obtained only by association with others of his kind. For that reason, he submits his will to the collective will, his consciousness to the collective consciousness. He accepts from the group the ideas, conclusions, and opinions common to it, and the motives of volition, such as customs and rules of conduct, which it collectively sanctions.

These ideas and motives are strictly the property of the group, not of its separate members. Such a prevailing unity of thought and sentiment does not rest on unanimity of opinion; it does not necessarily exclude any amount of individuality, and is consistent with the utmost freedom of the personal mind. Its basis is a similarity of form and direction of the psychical activities, guiding and modifying them in such a way that a general colour and tendency can be recognised.

If it is asked, on what ultimate psychical concept the differences of collective or group-minds are based

in a last analysis, I am inclined to answer with Wilhelm von Humboldt, that it is on the currently accepted relation of the material to the immaterial world. The solution adopted for this insoluble problem is the hidden spring of motive in the minds of all.

The actual existence of the group-mind can no more be denied than the constant inter-relation between it and the individual mind. It takes nothing from its reality that it exists only in individual wills. To deny it on that account, as Wundt admirably says, is as illogical as to deny the existence of a building because the single stones of which it is composed may be removed. Indeed, it might claim higher reality than the individual mind in that its will is more potent and can attain greater results by collective action.

Of course, there is no metaphysical "substance" or mythological "being" behind the collective mind. That were a nonsensical notion. Nor is it in any sense a voluntary invention, created by contract for utilitarian ends. That were a gross misconception. It is the actual agreement and interaction of individuals resulting in mental modes, tendencies, and powers not belonging to any one member, and moving under laws developed by the requirements of this independent existence. It is like an orchestra which

can produce harmonies by the blending of the strains of numerous instruments impossible to any one of them.

The sense or self-recognition of individual life as apart from group life varies widely. In the totemic bonds of savage life, in the guilds of higher grades, in the "society centres" of modern life, the individual consciously and willingly renounces nearly the whole of himself in favour of the circle which he enters.

When he attempts the opposite extreme, and prides himself on his insulation, his egotism, and antagonism to others, he usually deceives himself. No matter how selfishly he pursues his aims, it is ever in obedience to the influence of the group. From it he takes his thoughts and the language in which to express them, his economic values are those recognised by it, its ideals are his, he will strive in vain to escape the iron bands of the social order about him. Unknown to himself, he abides the slave of others.

The group has another advantage over him which he can in no wise diminish or avoid. He will die, but it will live. He, with his petty strivings and personal ambitions, will soon sink into the dateless night, but the social order of which he was a part will survive in other and younger generations, moving

forward to its destiny under compulsive forces of which he has not even an inkling, crushing his blind opposition under resistless wheels.

Not by antagonism to the group does the individual gain his highest personal aims, his fullest reality as an individual, but by devoting himself to the best interests of the group, learning what they really are, and furthering them by a study of the means adapted to their growth and fruition. This is "altruism," the living for others, in its highest sense, the aim not primarily the individual, but the group and its welfare.

This is the more needful because the group, as a psychical unit, is *never creative*. It is receptive, active, executive, but for its creative inspirations it depends upon the individual. What is called "originality," the stimuli and momenta of development, arise primarily from the single mind.

But it is equally true that the work of the group must precede the work of the individual, and prepare for it, if it is to be successful. Otherwise, the seed will be sown on barren ground.

In every historic event the group is the only active agent; through it the individual can bring to bear his limited powers over an indefinitely vast area, and with indefinitely multiplied force. History is a record of the sentiments and actions of groups; yet so little has this been understood, so obscured has this

been by the potency of personality, that until recently it has been little more than an account of individuals. Without the aid of the group, what would have become of the most famous heroes of the past?

I would sum up these reflections on the relations of the individual and the group by the practical deduction that to understand the individual we must study him in relation to the group, and to understand the group we must study it, primarily in the individuals of which it is composed, in both their physical and mental life; and secondly, in those principles and processes which it, as an entirely psychical product, presents peculiar to itself.

The group is *not* a "natural" product in the objective sense in which that word is employed in the term "natural sciences." It is a purely mental creation, though none the less real. It must be examined and investigated by other methods, therefore, than those customary in the biologic sciences.

Instead of studying external phenomena for their own sake, we must regard all such as valuable only as they indicate psychic changes, and as they can be translated into mental correlates. The study is, therefore, from within, and qualitative rather than quantitative, in this respect contrasting with experimental psychology and also with history.

When we examine in detail the interaction of the

individual and the group we may classify the processes which take place somewhat as follows :

The individual receives from the group the symbols for complex and general ideas—that is, the words of language ; he is also taught many complex purposeful motions, such as are needed in social and cultured life ; he is supplied with artificial objects for his use, as tools, clothing, shelter, etc. ; and he is constantly subjected to a certain amount of physical force from those around him—in other words, is “made to do” a variety of acts. The group may consciously strive to modify him, as in public education, religious instruction, and the like ; or it may act merely negatively in opposing any developments antagonistic to its own character. The individual may work for or against the group, or for himself only ; but in either case has to reckon with the group for what he obtains from it.

While the *unity* of the ethnic mind is fostered by a conscious effort to promote common interests, modes of expression, ambitions, and aims, its energy is in direct proportion to the cultivation of the sense of individuality among its members, for from the latter alone are born the impulses to progress. The fatal error of many communities has been to bend every effort to secure the former, while they neglected or actually endeavoured to suppress the latter.

I have been using the word "group" in a loose way. The time has now come to distinguish it from various other terms familiar to ethnology, such as tribe, folk, nation, people, stock, and race.

"Group" is the best English equivalent for the Greek *ethnos*, which word, by its derivation, means a number of people united together by habits and usages in common.

This at once places the group above the mere temporary aggregations, such as the crowd or the mob. The ethnic group is formed by the thoughts and aims of the lives of its members, not by their ephemeral emotions and actions.

Compared with nation, stock, or race, it is a generic term; for by "nation" we understand all united in the acceptance of one form of government; by "stock," those speaking dialects or tongues derived from one primitive language (linguistic stocks); and by "race," those connected by identity of physical traits. The "tribe" is merely the primitive form of the nation, while in English "folk" has a current application to certain classes in society and not to the whole of it.

The correlative of the ethnic group, or, in these pages, "the group," in German is *Volk* and in French, *le peuple*.

How these ethnic groups are formed, under what

complex conditions their differences arise, what influences are the most potent in their creation and preservation, will be considered in detail hereafter. At present it is sufficient to mention certain general principles, applicable to the formation of all ethnic groups.

First, it must be borne in mind that mere similarity and geographical contiguity are not enough to constitute an *ethnos*. The Fuegian hordes live under the same sky, speak closely related dialects and are physically alike; but no one would pretend 'that there is any unity among them. Their roving bands never meet but to fight and their only social occupation is mutual destruction. Nor would there be any true unity in a society however peaceful where each family isolates itself to the utmost from its neighbours and seeks to limit all its efforts and sympathies to its own members. Such a society might become high in numbers and extended in area; but it would have no true unity. It might even develop considerable results in thoughts, study, and invention; but they would remain sterile to the general weal, and contribute little or nothing to the progress of the race. Such was the condition of parts of Europe in the feudal ages.

The ethnic life is a mental life, and this consists not in the sameness brought about by the environ-

ment, nor even in ideas and acquirements, but in movement, comparison, and association of ideas.

The unity not merely of present traits but of future aims, not merely of ideas but of ideals, is the true unity which constitutes the ethnic mind. This is the foundation fact which must be constantly present to the student, if his researches in ethnic psychology are to be profitable.

In this it differs from racial psychology, for while doubtless each race has mental advantages and deficiencies which are its own and which largely decide the destiny of its members, these are not united in pursuit of one end. There is no unity of will and purpose.

Each individual partakes of this racial psychology as he does of many other mental unions, such as his church and his political party ; but that which has pre-eminence in history and psychology is not these, but that closer and paramount union to which he is bound by a common speech, ideas, motives, and hopes.

We must not forget, however, that under whatever connotation we understand the group, it is still composed of individuals ; and the relations which these bear to it require careful consideration.

The unity of a group can never be complete. The infinite variations of its individual members prevent

this. And here comes in an interesting law which has lately been defined by an American scientist. He has shown that precisely that trait or those traits which are the most distinguishing characteristics of a group vary the widest in the individuals of that group.

Let us take, for instance, a given community remarkable for the average height of its members. We shall find wider variations in this dimension among them than among a community less conspicuous in this measurement.

This appears to hold equally good for the statistics of longevity, of health and disease, and other physical traits. There is little doubt it is also of general application to mental qualities. The contradictory estimates of national character largely depend upon it. Not the bias of the observers but their ignorance of the operation of this law will often explain such discrepancies.

What method should we follow to avoid such an error? In other words, what formula can we devise to correct individual variation and arrive at a true average for the group?

This work has already been done for us. Diligent students of vital statistics have as good as demonstrated that when a given characteristic of a group can be expressed in numbers and these

projected by the graphic method, the resultant curve obtained will be one of those called by mathematicians binomial. Subtracting from the whole number one-tenth for aberrant forms or abnormal cases (the distribution of error), of the remainder, one-half will represent the mean, and one-fourth each will represent the plus and minus extremes. For example, suppose in a given community numbering one thousand adults the average height is 5 feet 6 inches ; in it, one hundred persons (one-tenth) will be either abnormally tall or short ; of the remainder, 450 will attain just about the total average height ; while 225 will be above and 225 below it.

We can fearlessly adopt this method of reasoning in ethnic psychology. When we speak of mental traits or ideas common to the group, we mean that they may be held as expressed by scarcely half of that group ; that in the remainder of the group they may be much more positively adopted or more or less rejected ; but inasmuch as such numerous exceptions largely annul each other's force, the general tendency and action of the group will be guided by the average rather than by either extreme.

The justice of this method is further supported by another general psychical law of groups. This is, that they attract in the direct ratio of their mass ; the more numerous a party is, the more adherents

will it obtain. Hence, although in the above example the mean, 450, is less than half of the whole number, yet it is much greater than either of the other three sub-groups, 100, 225, 225, and exerts therefore double the attractive power of the latter. That is, in a question of opinion, it will receive twice as many adherents as either of the latter. Hence the value of majorities as expressing the will of a community.

The principle of psychical action on which the above is based is one very familiar to students of psychology. It is that termed "collective suggestion." This is the overmastering tendency to imitate the examples of others, to act in accordance with the ideas and feelings which we witness in those around us. When such ideas and sentiments are constant, and conspicuously displayed, they overcome resistance and the individual mind is attracted to that of the group with like irresistible magnetism as in fairy lore drew the ship of the mariners to the load-stone rocks of Avalon.

From these considerations it will be understood that the group may be regarded mathematically as a "constant," the resultant of a number of "variables," the individuals of whom it is constituted.

Many writers of late years have spoken of the social unit, the group or the nation, as an "or-

ganism." Some have further defined it as a "super-organism" or a "physio-psychic organism."

Such expressions are well enough as figures of speech. They serve to accentuate the interdependence of parts and the potentiality of change and development in the ethnic mind. But the simile becomes illusory and deceptive when it is set up as a principle from which to deduce conclusions. The group is no more an organism than is any other psychical concept, that of the "*genus Homo*" for example.

A vital characteristic of the ethnic group is the degree of its *centralisation*. This is, in truth, a coefficient of its powers. Numbers may be said to increase thus by addition, but centralisation by multiplication. The centralisation, however, must be real; not simply a single point of action, but also a convergence of forces to that point. The French nation is popularly supposed to be centralised in Paris; but in fact the provinces are usually ignorant of national action there until after it has occurred. It is through modern methods of rapid transmission of intelligence that national groups can act with so much greater force than in earlier days.

The *permanence* of the ethnic group has been a matter much discussed by philosophers. Led on by a supposed analogy to the individual, governed by

the notion that the social unit is an "organism" and subject to the same laws as physical organisms, supported, as they imagined, by the teachings of history, writers of merit have claimed that the *ethnos* has a birth, an adolescence, a period of maturity, and old age and death, as has the individual.

Even such an acute thinker as Quetelet was so enamoured of this theory that he worked out the "natural longevity" of a nation, discovering it to be about ten times the greatest longevity of its individual members !

The doctrines of ethnic psychology, as I understand them, do not sanction such an opinion. The analogy of the group to an organism is purely fictitious ; the historic causes of the decay of nations are not the same and are not allied to those which bring about mortality in the individual.

There is no such thing as a natural death of a Society. It may be crushed by external force, but if it perishes from within, it has deliberately poisoned itself, has fallen a victim to preventable disease.

There is one catholicon, one elixir of life, which will preserve any society from decay, and confer upon it the blessing of eternal youth, if it is constantly remembered and administered.

That catholicon is to cherish and cultivate assiduously the one distinction which, I have pointed out,

lifts the human group above the communities of the ants, the bees, and the beavers; that is, that the chief aim of the community shall ever be to give each individual in it the best opportunity for the full development of his faculties.

If the history of the gradual decline and fall of any nation be investigated, it will be seen that the end has come through the violation of this, the one peculiar principle of *human* association. Hemmed in by castes, classes, or institutions, the human souls have atrophied, degenerated, grown decrepit and impotent, incapable of resisting the natural forces around them.

Though the ethnic mind does not run the same life-course as the individual body, yet it resembles this in its ceaseless change. It is forever altering both its contents, its purposes, and the intensity with which it pursues them.

Psychologists have classified these activities under three general expressions which we may call laws. They are, first, the law of Continuity; second, the law of Diversity of Purpose; and third, the law of Contrast.

The law of Continuity means that in the ethnic mental life there is a regulated course of growth or development; that each phase or condition is the logical result of previous phases or conditions.

The second law emphasises that the rate of growth depends chiefly on the diversity of aims which exists

in the community. As they are multiplied, growth is the more rapid. This is analogous to that law of organic forms by which evolution is in proportion to variation.

The third law, that of Contrast, applies to the ethnic mind the curious fact in mental life that a prolonged devotion to one idea leads to a reaction in which the opposite of that idea becomes dominant. This is even more conspicuous in the history of progressive nations than in that of individuals. Upon this depends that periodicity in the lives of peoples which has so often been remarked by historians.

The above-mentioned facts and laws demonstrate that there is a true unity of existence in the ethnic mind; that it has its own traits, forms, and processes of growth and decay, quite apart from those of the individual mind; that it is not to be studied by the methods of experimental psychology, but by methods drawn from the observation of its own modes of being; and that it is this abstraction, if you please, which is the prime factor in the fate of the group over which it rules.

But I must return again to the definition of the Group. It must not be said that I leave any obscurity in the connotation of that prominent word.

There may be—there always are—many forms of groups in the same community, and these by no

means cover each other coterminously. Take many an American village, for example. There are the religious groups, Protestant and Catholic; the political parties, Republicans and Democrats, not at all of the same individuals as the former; and there may be the linguistic groups, German and American, different again from both the former; and the racial groups, whites and negroes.

Something similar to this is found on a large scale in every people, every nation; and the serious problem presents itself,—how are we, from these heterogeneous elements, to reach anything which we can properly call the common sentiment, the general mind of the mass?

The example I have chosen of the American village is an extreme one. In a primitive, isolated tribe of Indians, in a remote mountain village, or a rarely visited island, the task would be vastly easier. But the principle in all cases is the same.

By eliminating particular after particular, as the logicians say, we finally reach a general, a consensus of opinion and aspiration on a variety of topics, with which the full number required by the mathematical method already stated will agree. These common sentiments will represent the active influence of that community, and very accurately measure its value in development.

Being an American village, we can without doubt predict that it will be of one mind that making money should be the chief aim of active exertion ; that respect for the law of the land should be cultivated ; and that performing recognised duties to one's family should be taught as indispensable.

One must not take it for granted, however, that such like salient features are necessarily the ones which govern and measure the powers and actions of the group. Such an error is very common. The chief trait of the Scot is popularly supposed to be his stinginess ; but the solid and lasting character of that people prove that they have souls above lucre. The English are pre-eminently mercantile, and Napoleon called them a nation of shopkeepers, but he discovered his mistake at Waterloo ; the apostle called the Cretans "liars and slow bellies," but Crete was the source of Greek law, and when the apostle elsewhere quoted a Gentile poet's concept of God as his own, that poet was a Cretan.

How, then, it will be asked, are we to distinguish the most vital from the most prominent traits of the ethnic mind, since they are not always, even not often, the same ?

The answer to that question is the main object of the second part of the present volume. Suffice it, therefore, here to say that all ethnic traits must be

weighed and measured by the contributions they make to the cultural history of mankind, to the realisation in daily life of those ideas which are the formative elements in civilisation.

Reverting once more to the definition of the group as portrayed in the ethnic mind, its traits are further brought into relief by the comparison of group with group.

The individuals are here dropped from sight, and the elements and processes of two or more ethnic minds are placed in contrast. They are compared in the manner in which they have conceived and carried out notions common to the species—let us say religion, or law, or social relations, or practical inventions. When the comparison is extended to all the cultural elements and the results tabulated, we reach fixed and accurate data for appraising ethnic mental ability, whether racial, tribal, or national.

There is nothing delusivē or fanciful in such comparisons. The results are obtained by recognised scientific methods, and are controlled by well-known mathematical laws. They establish the claims of ethnic psychology to a place among the exact sciences, and show that it has a field of its own not yet included in the domain of any of its neighbours.

CHAPTER III

PHYSIOLOGICAL VARIATION IN THE ETHNIC MIND

THUS furnished, as we have seen in the last chapter, with a common stock of faculties and desires, the primitive men set out from their unknown birthplace, to conquer the world. They journeyed east, north, south, and west, into foreign fields and under alien skies. Seized in the iron grasp of novel environment, each band must adapt itself to the new conditions or perish; for in their ignorance they knew not to wrest the power from Nature and make her their slave. They must bow and yield to her commands under penalty of death.

Compelled by external forces, they changed the hue of their skin and the shade of their hair; they grew tall of stature or sunk to pygmies; their skulls altered in shape, and their long bones rounded, or else flattened like those of apes.

Not less surprising were the alterations in their

minds. Some felt no desire for fixed abodes, and ever wandered, while others sowed fields and built cities; some remained in small, ungoverned bands, while others founded great empires and enacted iron codes; some were satisfied to compel the Unknown by magical rites, while others sought the wisdom of God and the secrets of Nature.

These variations, however, meant Progress; for repetition is not progress, and it is only by ceaseless change and endless experiment that one can find out the best. The separation of man into families and tribes and peoples was, in fact, a necessary condition to his improvement as a species. From the seeming chaos of changing forms the highest type emerged, as, in Greek myth, from the surging seas rose the perfect form of Aphrodite Anadyomene.

The chaos is indeed but seeming. The differences among men are the results of physiological processes, proceeding in definite directions under fixed laws, and adjusted so that they bring about calculable results. Let us turn to the examination of these processes, in their universal expressions operative everywhere, as well in the psychical as the physical world.

Psychical as well as physical; for the new conditions which transformed the bodies of the primitive horde left their impress also on the minds of its

members, not erasing any trait which made them Man, but bringing them into closer likeness between themselves, and by that act into sharper contrast to their neighbours. The varied practical needs of life fostered their peculiarities, and created a similarity of feelings and purposes, and a community of knowledge in each band. This acted as a sort of intellectual motherwater in which each individual mind of the band crystallised into the same shape, readily accepted the beliefs, imbibed the same prejudices, looked at the world through the same spectacles.

We may well believe that it was not long before contests arose between the primitive hordes. We are told, indeed, by a venerable authority that they began between the first two brothers. Then these diversities of body and mind decided the conflict. The stronger slew the weaker or drove them from the field ; unless, indeed, by craft or superior skill the weaker foiled the stronger, as, so endowed, in the long run they surely would. Thus the great law of Natural Selection, of the destruction of the less fit, exercised its sway to preserve that horde which, on the whole, was better adapted for preservation and gave it power over the land.

In the species Man the exemplification of this great law is, as I have intimated, essentially psychological, and its application is upon masses, upon ethnic

groups. History, the story of man's progress, deals only with these, not with individuals.

Progressive ethnic mental variation is therefore the theme for our immediate consideration, and especially as it is displayed in the processes of natural selection and adaptation. This is the physiology of ethnic psychology, the history of its normal progress to more specialised powers and higher types.

I cannot go amiss if I present it with a rather close adherence to the recognised method of natural science; for the impression is constantly gaining ground that the psychical life of Man follows the same laws as does his physical; or, to express the thought more accurately, that the one is the reflex of the other, for we can read both with equal correctness in terms of thought or terms of extension.

Such changes may take place in several directions: as in abolishing organs no longer useful; in reducing others which are diminishing in value; in strengthening those which are of immediate utility; and, by correlation, maintaining those relations of parts on which the "type" depends.

These changes are not "purposive"; they do not aim toward a future type, though they may result in one. Such a type may be more decadent than its antecedent, and be the prelude to extinction, under

this adamantine law of destruction; but if its variations have been physiological and adaptive, they will confer upon it the blessing of life, the gift of length of days.

Those changes which strengthen an organ or structure, or tend to develop and preserve new and useful variations are called "progressive"; those which tend to draw individual variation back to the current type or to reduce certain structures or functions are called "regressive" variations.

It would seem at first sight that such processes must tend in opposite directions—the one beneficial, the other injurious. In fact, both are preservative; but by contrasted physiological processes.

Progressive changes begin in the individual and pass by inheritance into the stock, when they have proved beneficial to it. They continue in action so long as they are useful. When their utility ceases, the energy of the economy is expended elsewhere, on other structures or faculties. The degeneration thus produced is "compensatory." It does not detract from but adds to the general viability of the organism.

What is most marvellous in this process is that the part or power rarely wholly disappears, no matter how long it has been useless. The pineal gland in the human brain is the remains of a third eye with

which our ancestors looked out from the top of their heads when they were Silurian fishes ; and the appendix vermiformis was an annex to their stomachs when they were herbaceous ruminants !

So it is in psychical anthropology. A department of it, Folklore, is taken up with such survivals, and strange are its revelations ! Our Christmas dinner is a reminiscence of a cannibal feast at the winter solstice. The dyed Easter egg is a relic of a myth of the dawn older than the Pyramids.

In strictly scientific language evolution is not always synonymous with progress. It means simply change or transformation within the limits of physiological laws—that is, that such changes tend, on the whole, to the preservation of the individual or do not conflict with it.

Life is the criterion of evolution. But the application of this standard is not always easy. The most salient variation is not necessarily the most important. Again, a variation admirably suited to a given mode of existence may be unfriendly to development by unfitting the stock for later and inevitable changes of environment.

In the psychical ethnic life there are, however, a limited number of characteristics, the symmetrical development of which cannot fail to bring out all the latent powers of the group in the struggle for its

independent existence; and, conversely, their neglect or faulty cultivation will surely pave the way to debility and disappearance. They are the primary factors of progressive variation in ethnic psychology.

The list of them is as follows:

- 1—Remembrance.
- 2—Industry.
- 3—Inventiveness.
- 4—Adaptability.
- 5—Receptiveness.
- 6—Forethought.

They are all essential to ethnic progress; though the special cultivation of one or the other must be dictated by the circumstances. The development must be in relation to the inner (mental) and outer (physical) demands upon the group, if it is to make the best of its life. They are the physiological elements of collective mental growth, standing in relation to it as do proper food, exercise, cleanliness, and the other hygienic methods to bodily health and strength.

1. *Remembrance*.—Knowledge is of no avail unless it is remembered. Experience may become prophetic, but if its words are forgotten, of what use is its wisdom? Hence the rudest savages seek means to strengthen their recollection of events and ideas. The Australian has his message stick, the Peruvian his knotted string (*quipu*), the Chippeway his *meday*

club,—all to help preserve tradition, ritual, knowledge, in some form.

Whatever technical process was devised to shape a war club, or to minister to the sense of beauty by adornment, whatever laws were framed to regulate the clan, whatever secrets were learned from nature, became of value to the group only in so far as the faculty of memory and the means of remembrance were cultivated.

I need not refer to the supreme treasure of written records, the national literatures of the world ; but it is worth noting that just to the extent that a nation cherishes its own history, lives in its past deeds, drinks from its own fonts of thought, does it develop its vitality and independence.

Tradition and instruction in what the group has already gained is the first condition of further advance. If the future is to rest on a secure foundation, it must be built on the experience of the past. Plato estimated the alphabet none too highly when he called it a gift of the gods. The dream of immortality in name is a mighty stimulus to effort. What were that fame worth that perished with our flesh ?

Under this head also comes what we broadly call Education, that which distributes to the new generation the garnered grain and treasured pearls of hundreds

of older generations ; which places in the hands of the young the tools of thought, the training in vocations, the pride in the noble achievements of the past, the acquaintance with their own powers and the means of increasing them, the precepts of justice, of love, and of truth, and the inspiration of grand ideals of life and work.

No past is too remote to be destitute of practical value to the present. No truth is too trivial to be regarded. Knowledge has long and wisely been esteemed the synonym of power. Art, science, the whole fabric of culture, are accumulations, memories, of millenniums of labour, of whose results all has been lost except that which has been recollected.

2. *Industry*.—The secret of all improvement in human life is the conscious effort to improve. Idleness is the chief obstacle to advancement.. Disuse of brain-function degenerates the tissues faster than misuse. Labour, work, activity, exercise,—these are the only means to strengthen the powers we have and insure their survival.

Not all effort is equally beneficial. It may be honestly intended, but misdirected, and lead to perdition ; it may be the tread-mill labour which reduces the man to a machine, and blunts and dulls his soul ; it may be, as with those who “work hard at play,” consumed in frivolous pastimes and trivial objects.

The true aim of all effort, that aim which most contributes to progress, is the conquest of the environment, the subjection of it to the enlightened reason and the individual will. "The one process of human evolution," says a thoughtful writer, "is the passage from a merely mechanical to a rational life."

"Adaptation to environment" belongs to plant life and brute life. Man at his best aims at the nobler task of moulding the environment to his own will and wishes. He is not its slave, but its master. Does arctic cold threaten to freeze the blood in his veins? He builds a hut and lights a lamp; and the summer zephyr is not milder than the air he breathes. Does the equatorial sun dart its fatal rays from the zenith? He spreads an umbrella and dons a helmet, and is as cool as if under orchard shades of temperate zones.

Reason-directed, unflagging activity,—this is the one indispensable and all-sufficient security for the indefinite progress of individual or group. The definition of "genius," said Goethe, "is the willingness to labour unremittingly." The willingness presupposes the will, and he of the indomitable will soon becomes master of his purpose.

This trait has long been familiar as a criterion in ethnic psychology. Professor Klemm in his history

of human culture, written half a century ago, divided the tribes and nations of humanity into those who have been "passive" and those who have been "active." He maintained that the love of labour is the simple and sufficient measure for the capacities of any race.

Many later writers have followed him in this discrimination, although they phrase it in various forms. The latest, Professor Vierkandt, repeats it in a more psychological guise when he states that the real source and centre of all differences between the cultures of human groups is the one difference between their voluntary and involuntary activities. The latter are instinctive, the former reflective; the latter are mechanical, the former are rational; the latter are of bondage, the former of freedom.

The sum of average brain-industry in an ethnic mind is the measure of its comparative value. Not single brilliant examples of genius, cases here and there of exceptional ability, but a prevailing love of labour is what guarantees success. A true genius, a Camoens or a Cervantes, belongs more to the world than to the nation. Both these illustrious names have stimulated thought more in foreign lands than in their own homes.

3. *Inventiveness*.—When the neolithic man invented a sword of bronze to replace his dagger of

stone, he invested his tribe with the kingship of the known world. The less-inventive hordes became their slaves.

The victory of man over nature has been won by his inventions ; and the tribe, group, or nation which leads in the control of natural forces will also lead in the struggle for existence, and supremacy. Others may sing sweeter songs or dream diviner visions, but the potency of life will not be won thereby.

Inventiveness is another word for that knowledge which is really power, force, strength—brutal, if you will, but present, actual.

Man is distinctively a tool-using animal, and those with the most efficient tools will bring the others to terms ; for when it is a tool of war, a weapon, victory is to him who has the best.

Inventiveness is the foe of habit, and habit is the foe to advancement. As the sickle gave way to the scythe, and the scythe to the mowing-machine, the food-supply was insured against failure, famines disappeared, and aggregations of millions in cities became possible.

An invention is something concrete, objective. It substitutes reality for a dream, and in the end surpasses, in the elements of the marvellous, all dreams. The Arabian Nights tell of no magic spell so potent as to enable persons to speak to each other a thousand

miles apart. But invention has made that the most commonplace of incidents.

As there is no calculable limit to the natural forces, so there is none to our possible control of them. Reason has this in itself, that qualitatively it is of higher order than force and can control it to any extent. The nation which constantly encourages this application of reason must be the most forcible, the most powerful. Would you forecast the fate of the present "great powers" in the twentieth century? The books of prophecy are open. They are the records of the patent offices.

4. *Adaptability*.—The fundamental law of life in organic forms is their relative ability to adapt themselves to environments.

This is just as true of ethnic units, physically and mentally. When I come to speak of acclimatisation, I shall dwell on the former phase; now, I emphasise the necessity of mental adaptation, as shown in laws, religions, customs, and thoughts.

There must be nothing "hide-bound" in the tribe or nation which migrates or which expands into new conditions of life. Home-sickness must be unknown to it. It must cherish no ancient local prejudices, carry with it no baggage which it is not ready to exchange for something more suitable. More than that, it must be on the alert to discover what alterations in

home habits should be made, and hasten to make them.

Adaptability is not the loss of national character. We may change our sky with profit, but keep our minds. To lose ourselves in travelling would be a loss irreparable. The human group which succumbs to new environment does not adapt itself to it, but is drowned in it. The changes required by adaptability are chiefly external and of will. They are such as the recognition of new experiences suggests as advisable for survival.

Adaptability is an active trait. To be most effective it must be conscious and purposive. The knowledge gained from others must be utilised intentionally to the special advantage of the group. In this form it is a product of the higher culture. Primitive peoples, when they migrated, submitted themselves without reflection to the new influences around them; enlightened groups are on their guard and sedulously retain what they bring with them if they see it is better than what they find, or accept the latter if it is superior. True adaptability, therefore, is the result of conscious reasoning.

5. *Receptiveness*.—Not only should the ethnic mind be ready to adapt itself to changed conditions, but it should be ever ready to give admittance to new knowledge; not only passively, but should actively

seek it from others. Only thus can it progress surely and rapidly. Anything in the nature of "Chauvinism" is destructive to breadth of conception. The national egotism which scorns to learn of neighbours prepares the pathway to national ruin.

Primitive tribes borrowed extensively one from the other. The traditions, games, arts, and inventions were appropriated by the most mentally energetic, and by them such secured dominion and prosperity.

Civilisation alters not this process. That nation to-day which is most eager to learn from others, which is furthest from the fatal delusion that all wisdom flows from its own springs, will surely be in the van of progress.

Receptiveness in national life is gauged by the knowledge the nation has of others. This can be gained by intelligent travel or by study. Where the citizens of a country travel little or for amusement only, and are but slightly conversant with other languages than their own, we may be sure that the national mind is lacking in this quality. The number of foreign students in a great university is a test of this element of progress in the character of their respective nationalities.

Hence the practical deduction of the importance of a knowledge of modern languages. Without them, the minds of other nations are closed books to us.

They may be surpassing us in wisdom and we be ignorant of it. In that case, some day we or our children will weep for our negligence.

6. *Forethought*.—In one of his works Professor Letourneau remarks that forethought is *par excellence* the ripe fruit of intellectual development. The ancient Greeks embodied this truth in the pregnant myth of Prometheus (*Forethought*), who stole fire from the gods and gave it unto men and his brother Epimetheus (*Afterthought*).

He who is willing to sacrifice the present for the future must possess self-control, fixity of purpose, faith in what governs the future, decision of character. His actions must be conscious, purposive, directed by intelligence. His will must be trained in the choice of motive, and his passions curbed into obedience to his reason. Self-restraint, self-sacrifice, even self-immolation, are the virtues he must be ready to practise.

The distant aim for which he is thus denying himself may be within the confines of his own expectation of life, and thus be after all centred in personal ambitions; or it may be directed toward some hoped-for life hereafter, in the next world, the spirit-land; or, noblest of all, it may be in the interest of unborn generations and humanity at large. Perhaps in his zeal he misses present joys for the illusions of a

fancied future; but better this than to sacrifice the future to the present.

In such deliberate and conscious planning for remote aims he is not like the squirrel who lays up a store of nuts for the winter; for the man exercises his will and decides between motives, and his actions are not controlled by external events but by inner, psychical reflections. There is even something not despicable in that avarice which heaps up riches and knows not who shall enjoy them. In it is revealed that anxiety to labour for a remote future, at present sacrifice, which, in nobler expressions, is a fine, essentially human, trait.

This characteristic differs widely in mankind, and in individuals. So significant is it of the progress of the group that in various forms it has been chosen by several writers as the main distinction between savagery and civilisation. The efforts of the barbarian aim at the satisfaction of his immediate wants only. His means of livelihood—hunting, fishing, and the collection of natural products—do not admit of saving for a far-off future. As the soul rises in culture, its horizon expands. Not merely against winter's want, but against the inevitable periods of sickness and decrepitude which lie in wait for all, must we be prepared. Then there are the feeble and the helpless, and farther still the unborn, our

descendants, for whom we feel responsible. Finally, the horizon falls co-equal with the limits of the world, and the future of all humanity appeals to the loftiest souls as demanding their strenuous labours.

The best-directed efforts of humanitarians to-day are aimed at the cultivation of forethought in the minds and habits of the lower, so called, improvident classes of society. Wise governments are engaged in providing secure depositories for small savings, in devising methods of insurance against want in old age and poverty, and in urging upon all the wisdom of guarding property against attacks, thus aiding in the survival of the nations.

These are the primary factors of progress in the ethnic mind. Everywhere and at all times their assiduous cultivation makes for national strength and life. Where they are all active, success is assured. Where even one is neglected danger is incurred.

But, it will be objected, are there not other mental traits just as necessary,—for instance, courage, enthusiasm, loyalty, patriotism? Yes, they are sometimes advantageous, sometimes necessary; but these and similar emotions are secondary; in themselves, they do not insure progress; in frequent instances, they oppose it, and lead their possessors to ruin.

Blind courage, for example, like misdirected energy, is mischievous and destructive.

Emotions and sentiments are necessary stimulants to action. They are indefinitely valuable in national character, but only to the extent that they are governed and directed by intelligence. In themselves they are blind and unreasoning impulses, and dangerous guides. In culture history, they belong to primitive or half-civilised people, incapable of holding rational conduct. By means of them, astute and unscrupulous rulers sway the masses, exciting them to actions detrimental to themselves.

The real factors in ethnic evolution must ever be those which are rational, conscious, voluntary. As voluntary, they require freedom, liberty of choice and of action. Freedom is an external condition, and unless it is enjoyed without other restraint than the limitation of the same privilege in others, the group can never reach its complete development. In the theory of progress, therefore, it should be always given as the primary condition of growth.

The physiological processes by which regressive variation affects the ethnic mind are chiefly three :

1. Absorption through concentration elsewhere.
2. Disuse or neglect of faculties.
3. Reaction from natural limitations.

Such changes as these are not merely consistent

with ethnic advancement but essential to it. They indicate simply a re-distribution of the vital forces in accordance with the demands of new conditions. This is a phenomenon constantly seen in the individual life of organic beings of every grade, and that it extends to the species and to the mental powers proves that it is an universal law.

Many have maintained that regressive variation proceeds in an inverse direction from progressive evolution, eliminating the most recently acquired characteristics first. Not a few have sought to apply this supposed law to ethnic conditions and sociological factors. But recent authorities of weight, who have examined this question with care, regard the instances supposed to confirm such a theory as coincidences only, or explicable on other grounds.

The term "regressive," therefore, is to be understood as applying to a physiological and healthy process, by which the sum of nutrition in an organism is expended more upon one or several elements of that organism at the expense of other elements. The latter, therefore, reduced in sustenance, undergo "regressive" changes, atrophy, or diminish.

In mental life this is paralleled by the cultivation of some faculties to the neglect of others. Those to which we "pay attention," as the phrase is, improve, while those which we neglect are weakened.

What is here noted of the individual is true of the group. Indeed, it is a leading fact in the psychical history of the species. Man has paid heavily for all his winnings in the intellectual field by losses of many a power which would serve him well had he retained it. He has forfeited the instincts which once were his guides, the acuteness of his senses has gone, the happy carelessness of his youth has deserted him. We may all join in the lament of Mrs. Browning :

“I have lost, ah, many a pleasure,
Many a hope and many a power.”

In applying these general facts to the variations of the ethnic mind, the principal distinction to observe is between *relative* regressive and *actual* regressive changes.

The former are not only consistent with general progress, but in some sense a condition of it. In following the steep ascent of advancement, we must cast aside some of our baggage. We must husband our resources and spend them where the return will be most bountiful. Where we strike the balance of our mental losses and gains and find it in favour of general improvement, we may rest content.

i. Absorption through Concentration Elsewhere. —The concentration of the ethnic mind on the cultivation of one group-trait infallibly leads to a diminu-

tion of other faculties. The group has a fixed amount of time, activity, and mental force, and if this is concentrated chiefly on one purpose, others must suffer.

History offers numberless examples of this. A few will suffice. The Vikings of Norseland had but one vocation—war; and though they repeatedly founded kingdoms in the south, not one survived. The capacities for peaceful life were lost in them, but for generations they were the terror of the more numerous and highly cultured nations of the south.

Exclusive devotion to the religious sentiment has reduced many peoples to practical imbecility, especially where the State has used its powers to force a particular church upon the community. Nothing, indeed, has brought about more complete intellectual atrophy.

These are examples where the process under consideration has been misdirected or carried too far. When it is properly guided, the compensation for the loss or diminution of one faculty is vastly greater than the value of that faculty. Thus, it was through the cultivation of his intelligence that early man lost his instincts. Through an earnest desire for peace which sprang up in the cities of the Middle Ages, the constant strife between the feudal nobles was measurably checked, to the signal advantage of the nation.

Where the stress of mental attention is directed to the cultivation of secondary traits or of those which make against the general welfare, the process is still physiological; it may, indeed, for the time be advantageous, concentrating the group-feeling and fitting the nation for its immediate conditions. Thus, in the present age, industrialism attracts to its sphere most of the ability of several leading nations. It offers not in itself a high ideal of life, but appears to be one peculiarly suited to the prevailing conditions of humanity. It stores reserve national force which will, doubtless, in time be expended on nobler aims.

2. *Disuse or Neglect of Faculties.*—The impairment of mental powers through disuse is one of the most common phenomena of psychology. Men are much more colour-blind than women, because they exert less the faculty of distinguishing hues. Persons who do not practise memorising soon lose the power.

In the history of nations this has been most conspicuous in the neglect of the military spirit; Carthage yielded to Rome, and Rome to the barbarian, chiefly because a distaste for personal exposure in combat led each nation in time to depend on mercenaries for defence. For centuries in China the vocation of the soldier has been looked upon as inferior

to that of the scholar or the statesman ; and, however just this might be in the abstract, it so weakened the national integrity that the vast Sinitic empire is now tottering to ruin.

Disuse may arise from two conditions : the one, from neglect and overattention to other faculties ; the other, from absence of opportunity.

Both are abundantly represented in ethnic psychology. Of the former, I have just given instances ; while of the latter the deliberate avoidance by large groups of certain areas of mental life are examples in point. Thus, the Society of Friends (Quakers) have for two hundred and fifty years expelled the cultivation of the fine arts from their education. The result is a loss of the æsthetic faculties, but a remarkable gain in other directions—such as sobriety, longevity, business success. Whether the compensation is sufficient seems, however, to be decided in the negative by the Friends themselves.

Other examples present themselves. The aristocracy of Siam regard all forms of work as so degrading that they allow their finger-nails to grow five or six inches in length to prove that their hands have never been soiled with labour. Needless to say that this disuse of their muscles is followed by atrophy of their brain-cells, so that they are an emasculate and enfeebled group. The theory of

concentration and disuse of faculties in the group led to the system of castes, the most striking example of which is in India, where they are divided upon race lines. The white Brahmans are the priests, legislators, scholars, and diplomats; the red Rajpoots are the warriors and chieftains; the yellow Mongols are the commercial and agricultural class; while the black Dravidians are the mechanics and herdsmen. Each caste adopts its special branch of activity and avoids that traditionally belonging to another caste.

Although a similar theory has been widely popular in many states, such a division of labour and responsibility has in it elements of debility which in the long run must bring about social disintegration. It conflicts with the unity of the ethnic mind.

3. *Reaction from Natural Limitations.*—As there is a difference in the mental aptitudes of individuals which no training can equalise, so there is in those of human groups. Its causes do not concern us here. The fact remains and must be faced.

There are natural limitations to each mind and to each group of minds. Compared with the most highly gifted, the less so stand in the physiological relation of "rudimentary organs." When brought into contact, the latter will either succumb or accept a subordinate position.

The American Indians, as a race, were compar-

atively highly gifted. They created an order of architecture and even devised a system of phonetic writing; but none of their states was of long duration, and none of their so-called "empires" rose above the level of a temporary confederacy.

The limitations of the racial mind were such that a complex social organisation was impossible for them. In the forms of their highest governments, those of the Aztecs, Mayas, and Peruvians, we see repeated on a large scale the simple and insufficient models of the rude hunting tribes of the plains.

This is also true of the black race of Africa. The powerful monarchies which at times have been erected in that continent over the dead bodies of myriads of victims have lasted but a generation or two. The natural limitations of the racial mind prevented it.

Many other examples could be cited. Indeed, the law of "thus far shalt thou go and no farther" tells the story of most of the failures of races and peoples. They fell through mental inability to succeed. They had reached the natural limit of their activities.

But there is in this no occasion to deduce a conclusion of fatalism. These limitations have been operative in great measure because they have been unrecognised, and no effort has been made to escape them. Though they may not be remedied, their evil effects may be avoided by enlightened prevision. They

act like other natural laws, and all such laws can be turned to man's advantage, if he sets about it wisely.

MODES AND RATES OF ETHNIC VARIATION.—Both progressive and regressive mental variations are formed of constructive, synthetic evolution ; both are necessary to general advancement ; both have their place in the scheme of national health and growth. They belong among what the physiologist calls "anabolic" processes—those whose tendency is to preserve and develop the species.

There has, however, been frequent misunderstanding of the modes of action of these processes and the rate of their movement. This misconception exists widely to-day. Many writers have mistaken actual advance for degeneration, or claimed that some nation or stage of culture was superior to another from some single real or imagined feature. Thus Rousseau and his school, enamoured of the supposed personal freedom of the savage, lauded the existence of man "in a state of nature" ; and their followers still assail modern civilisation as a failure.

It becomes important, therefore, to examine the modes of healthy progress so that we may understand its sometimes strange aspects.

These modes are three in number :

i. In lines, either parallel (homoplastic) or divergent (heteroplastic).

2. In circles, or curved forms (spirals).
3. In waves, rhythmic undulatory forms.

1. *Parallel and Divergent Variation*.—Evolutionists are familiar with these two forms of progressive variation in the organic world. They are equally evident in human progress.

No fact in ethnology is more striking than the parallelisms of primitive culture. Go where we will among the savage tribes of the globe, we find them developing the same arts along the same lines, framing their tribal organisations on the same models, calling in similar words on the same gods. Not only in this but in what seem matters of caprice, fancy, and local colour, the same similarity, almost identity, prevails. They tell stories of like plots, decorate their weapons in like patterns, dance and sing in like forms.

Yet, though so much alike, so "tarred with the same stick," each tribe and group is different. Each has its own imprint and character. Each has its points of individuality.

This is "divergent" variation, just as universal, just as inevitable as the parallelism we have been considering. This extends into minute and seemingly unimportant details. We may, for example, compare the stone axes of neighbouring American tribes. In a casual survey, they look alike; a close

inspection reveals slight but constant differences. The trained eye can distinguish their place of origin without difficulty.

This inherent divergence is so profound that two well-marked groups become incapable of mental unity. They may be separated by an imaginary line, and have been for generations under like climatic and cultural conditions, but the imprint of the divergence is ineradicable. If they have the same religion, they will understand it differently ; the same events will impress them differently ; their feeling and their hopes will be asunder.

While this is true, it is also true that a new stimulus to progress is created by the union of divergent lines of thought. The resultant is a fresh element in mental life, a new birth independent of either parent.

Such unions are brought about either by similarity or contrast. There is a species of elective affinity between certain lines of psychical development which at once unites them as they approach each other.

There is also a similar union induced by contrasted psychical states. We say familiarly that "opposites attract each other," and it is a maxim drawn from frequent experience. The rapid changes from social freedom to military tyranny in the mercurial population of some states seem more gratifying

to the ethnic spirit than a continued stable government.

Parallel variations lead to similarity in products. They are "homoplastic," to use the term of the evolutionist. Primitive tribes, developing under the same general conditions of environment, are strikingly alike in culture.

Divergent variations are "heteroplastic," that is, they lead to new products, and hence are the higher activities in all that makes for advancement. Whatever multiplies them stimulates the growth of culture.

2. *Variation in Circles or Curves.*—Both parallel and divergent evolution are expressions of continuity of progress in lines, extending from point to point, intersecting to produce other lines of new directions.

Such a rectilinear scheme is the simplest that we can sketch of human advancement; and for many purposes it is sufficiently correct. It does not, however, fully express the geometrical representation of such agencies as we are considering. Professor Baldwin has justly remarked that there is a "circular activity" in all progress. Its influence is not aimed solely at a point ahead, but extends itself in all directions. The reception of a new and true idea in the human mind may be likened to the introduction of a ray of sunlight into a darkened room. Its

chief force is seen in the linear shaft of light, but the illumination extends in some degree to the whole space.

Johannes Schmidt has shown that the distribution of the early Aryan dialects and religions was not from the point of common origin by right lines of migration in different directions, but should be represented diagrammatically by a series of irregular circles and ellipses, overlapping each other. The tendency to variation arises in some centre and spreads from it in a series of curves. These meeting others lead to an "interlinking" of cultural areas.

This is true of the other elements of ethnic culture. The localities where many such overlappings occurred became secondary centres from which in turn the circular activity of culture was propagated.

A mart where many visitors from different nations congregated would receive some new learning from all and through its concentration would impart this higher potency in some measure to all. For example, the city of Nippur, on the Babylonian plain, attracted twenty-five hundred years ago to its markets not only Assyrians and Edomites, but Medes and Persians from the East, Syrians and Hittites from the West, and probably Greeks and Egyptians and Arabians from remoter lands.

Human progress has been likened by some to

a spiral figure where each advance is a repetition of a former stage but with improvements to it. This is a combination of the right line and the curve; but the notion that repetition or recapitulation exists in evolution in any other form than that of renewed effort finds little support in natural science.

3. *Variation in Waves, or Rhythmic Undulations.*

— Some of the most recent speculations on the ultimate forces of the universe lead to the belief that they are maintained in activity by an eternal rhythmic pulsation or undulation, generating its energy from its periods of repose.

This doctrine has been applied by Professor Gerland to the progress of the human race. His teaching is that after a period of rapid advance there follows one of depression, which in turn is succeeded by another of advance, reaching a higher development than any which preceded it.

Other writers have expressed this notion in the form that after a period of activity and invention follows one of repose and reflection, giving way in turn to another of activity.

THE RATE OF PROGRESS.—Professor de Mortillet calculates from a wide range of data, geologic and archæologic, that man has lived on the earth about 240,000 years. The most conservative student of prehistoric records would not estimate the life of our

species at less than fifty thousand years, and it is much more likely to be double that duration.

The date of anything like civilisation is much more recent. Even in its oldest centres, as Egypt or Babylonia, to place its beginning ten thousand years ago is to exceed the demands of the boldest antiquary; while over most of the now civilised areas of the globe a condition of barbarism prevailed until less than two thousand years ago.

These facts prove wide variations in the rate of progress, very slow movements in earlier times and lower conditions, singularly rapid advances in later high conditions.

We are led to the conclusion, therefore, that the rate is not by one mode of progression but by several.

1. By arithmetical progression (addition).
2. By geometrical progression (multiplication).
3. By saltatory progression (permutation).

These are not to be applied too strictly, but it is safe to make the general statement about them that they correspond to the three stages of culture,—savagery, half-culture, and full-culture.

The simplest rate is by adding one invention or art to another, as does the savage in his lowest stage to-day and as did primitive man for myriads of years. Each such addition is so much gained, but reflects lit-

tle improvement on the general life. Thus the Australian began with a stone fastened to a wooden handle, and with which he could strike a blow, scratch the earth, or tear flesh. To this he added in time a spear or javelin, a club, and finally that curious weapon, the boomerang. Each of these inventions helped him just to the extent he used it and not more. His general condition was not bettered beyond that amount. It was as if he had added a hundred dollars to his capital and enjoyed the interest of the investment. His was arithmetical progression.

This merely arithmetical progression by simple addition, $2 + 2 + 2 + 2 = 8$, explains why the introduction or invention of very important technical procedures have frequently been of no influence on the general culture of a people. Thus, the smelting and forging of iron has been known from time immemorial among the African blacks, and many of them are skilful blacksmiths; but beyond its immediate convenience for weapons, the art did them no benefit. The Chinese knew the compass and gunpowder many centuries before the Europeans, but their methods of war and navigation received no impulse from these potent allies.

French physiologists have defined the human brain as "an organ of repetition and multiplication." So long as its activities are confined to mere imitation,

following a set example, it employs the former function only, and the progress of the group must be very slow.

This was not Mr. Lewis H. Morgan's opinion. That thoughtful ethnologist maintained that "from first to last human progress has been in a ratio not rigorously but essentially geometrical." But the arguments on which he chiefly based this maxim, so far as it applies to primitive conditions were the development of articulate speech and the social, "gentile" organisation; and neither of these resulted from a conscious effort of mind.

Progress does proceed in a geometrical ratio—that is, by multiplication, when an invention reacts on the sum of the ethnic possessions to increase their general value—when, as we say, it has an indefinite number of "applications." This is seen in the recognition of the mechanical powers,—the lever, the pulley, the screw, the weighing-beam, and so on. In ship-building, the oar, the rudder, and the sail improved the whole system of water transportation.

Geometrical ratio increases rapidly. It is represented by a series $2 \times 2 \times 2 \times 2 = 16$. But the augment by permutation is still greater. This is shown in the series $2 \times 3 \times 4 \times 5 = 120$. Mr. George Iles claims that this is the true rate of modern progress as represented by the effect on the world of printing,

steam, electricity, and photography. This is progress "saltatory," or by leaps. It explains, he believes, the sudden and rapid advance of some periods, and also the losses of continuity sometimes observed. His maxim is: "The newest of the factors of culture multiplies all the factors which went before it."

CHAPTER IV

PATHOLOGICAL VARIATION IN THE ETHNIC MIND

WE have seen in the preceding chapter that atrophy and regression are an essential process of progressive evolution, necessary in order that the preponderance of nutrition may be cast in favour of the most useful organs and structures.

This is "physiological" degeneration, "degeneration with compensation," the result of which is finally favourable to the general economy.

But there is another form of degeneration, the tendency of which is distinctly injurious to the organism as a whole, and which, if unchecked, would compass its destruction. This is "pathological degeneration," "degeneration without compensation."

Although such processes are also biologic,—that is, carried on by life products (cellular neoplasms),—they are incapable of independent existence and are always warring against that of the organism in which

they are engendered. It is an axiom that the laws of progressive evolution do not apply to pathological processes (Virchow).

In the history of the mental life of individuals and nations we find a striking parallelism to these physical processes, certain degenerations bringing with them compensations in the growth of higher faculties, others tending inevitably to the destruction of the individual or the group. The latter belongs to the domain of "ethnic psycho-pathology."

Psychologists have shunned this field. "Psychology," says a recent American writer, "must concern itself with the *normal* mind"; and a German author of merit has insisted that mental pathology has no place in ethnology, because this science occupies itself only with the progress of mankind.

Much more correct is the opinion of Dr. Ireland that "it is quite erroneous to treat the history of the human race as that of the sane alone"; and, indeed, we may almost go so far as Professor Capitan, of the School of Anthropology of Paris, and say: "Everybody is diseased. Nobody is healthy. We are obliged to study mankind in a constantly morbid condition of body and mind." Or we may go as far as Pascal, when he says, "Men are naturally so insane that he is deemed insane who is not insane with the rest."

Ethnic psychology is obliged to take into account the constant presence and powerful action of pathological mental elements. Tribes and nations have been destroyed by war or by catastrophes ; but much more frequently some disease of the ethnic mind itself has prepared its own extinction.

Here an important distinction is necessary. Ethnic mental disease has no relation to the frequency of individual cases of insanity. These do not affect the ethnic mind because that is the outcome of the intelligence of the community, not of its irresponsible members.

For this reason ethnic psycho-pathology cannot be discussed wholly from the standpoint of insanity, although the analogies are such that we can profitably compare them in outline, and this I shall attempt.

A definition is sometimes useful, so I present the following :

A pathological condition of the ethnic mind is present when it is chronically incapable of directing the activities of the group correctly toward self-preservation and development.

Like all definitions in natural science, this one is not to be applied literally in all cases. The incapacity may be present and yet not to such a degree as to be positively destructive. All nations have some insane tendencies, as have all individuals ; and it is

true, as a specialist has said : "The more one knows of insanity, the less does it seem to differ from the normal condition."

These pathological traits of the ethnic mind can be analysed and classified. They will be found to arise

1. From some intellectual deficiency or perversion ; or
2. From some persistent disturbance of the emotional life.

No one will demand that every member of a group should suffer from such conditions in order that its collective mind should betray morbid consequences. It is enough if a majority, or even a decided minority, providing it exerts the requisite influence on the mass, is in such a pathological state. A degenerate nobility or a dissolute priesthood has often worked the ruin of a state through the contagion of example and its control of lower classes.

Before considering in detail the varied forms under which these diseased mental traits present themselves, it will be well to examine the general causes to which they are due.

ETIOLOGY.—Each of such pathological conditions of the ethnic mind has a basis in some prevailing physical neurosis, the origin of which can be traced in the ethnic history, and which becomes hereditary in the stock. For of these two principles no student

of the subject can doubt, (1) that every pathological mental manifestation corresponds to a neuro-pathic change, and (2) that whatever may be said about the transmission of acquired characters in physiology, no physician can for a moment doubt that morbid infection may be passed down from generation to generation.

For these reasons the study of causes in ethnic pathology becomes of enormous practical moment. Only by an acquaintance with them can preventive and curative remedies be applied.

These causes are, at first, always *external* and *individual*. They proceed from some form of "environment," mental or physical. But the morbid impression, once fully received, is often indelible, becomes fixed in the type, and is but little influenced by external agencies.

These primary causes of true ethnic degeneration I shall consider under four headings.

1. Imperfect Nutrition.
2. Sexual Subversions.
3. Toxic Agents.
4. Mental Shocks.

No one of these can act in the long run in other than a deleterious manner on the ethnic mind. There is nothing "compensatory" in any one of them or so little that it need not be reckoned.

1. *Imperfect Nutrition.*—It has been said broadly that all psycho-pathic and regressive conditions arise from malnutrition (Féré). This is true, in a sense, but does not carry us far in the direction of treatment. We ask a closer definition of origins.

There is no doubt of the intimate relationship of ample nutrition and intellectual progress; but while it is well to avoid the ancient notion of the independence of soul and body and that the former is superior to the latter, we must guard against the modern extreme of Buckle and his followers, that the history of nations can be traced to the food they eat. Man is omnivorous, and his well-being is nourished by food of any kind, providing it is nutritious and easily assimilable. The effort which has often been made to trace the character of tribes and nations to some prevalent diet—be it of fish or flesh, or vegetable products—is fanciful, and yields no positive facts. What does harm is not some particular kind but a general insufficiency of aliment.

Imperfect nutrition may be traced to three principal sources. 1. Insufficient or unsuitable food. 2. Lack of variety. 3. Improper preparation of food.

The careful researches of Collignon, Ranke, Ammon, and others have traced the stunted forms, defective bodies, and low intellectual development of the Lapps, the mountaineers of central Europe

and the Bushmen of the Kalihari desert to one cause, *la misère*, lack of sufficient and appropriate food. This is certain to bring about degeneration of organs, incomplete development, and loss of brain power. Continued through generations, a hereditary taint is engendered which saps the vigour of the stock, and cannot be eradicated by improved conditions.

Unsuitable food is usually consumed on account of the scarcity of better material, but at times from a morbid craving. Examples are the unctuous clay which was swallowed by various tribes in America and Australia, and also by some of the "poor white trash" of Georgia. The ergoted rye and maize to which some of the peasantry of France and Italy are forced to have recourse exerts a disastrous influence on both body and mind.

But food may be ever so excellent in itself, yet unsuitable to the geographic and other conditions. The Eskimo thrives on blubber and raw fish; but such a diet in Ceylon would be as inappropriate as the Hindoo's boiled rice for an exclusive diet in Greenland.

Lack of variety interferes with nutrition even when the food material itself is ample. By structure and habit man is omnivorous, and suffers when confined to a single article of diet. The blood becomes depraved and scorbutic symptoms often appear. Na-

tions who mainly live on some one substance—rice, cassava, potatoes, etc.—suffer, lose their power of adaptation to their surroundings, as was remarked by Alexander von Humboldt, and are more liable to disease. Owing also to the partial sustenance thus furnished, the brain-cells are less progressive and energetic. There are nearly a score of chemical elements in the body, all of which must be supplied by the aliment if maximum physical health is to be attained and the highest energy and moral vigour are desired; for, although it is not correct to assert, as some have claimed, that the physical insures psychical perfection, it is undoubtedly true that the mind is never at its best in a feeble and sickly body. Dr. Johnson was more than half right when he argued that a sick man is a scoundrel!

A volume might be written on the influence of the preparation of food on national character. Cookery is one of the fine arts, and its development has been parallel with general culture. No tribe takes its food habitually raw. The Eskimo will freeze it first, the Tartar readies his steak by placing it beneath his saddle, and the African cannibal will soak his human morsel in water. Before pots or kettles were invented, the flesh was roasted over the fire or in trenches covered with hot coals.

Cookery renders food more assimilable, more

digestible, and thus allows the brain a better chance to do its work. Frying hardens and soddens food, and the frying-pan is, therefore, an enemy to civilisation. Chewing coarse, hard, and uncooked food develops the muscles of the jaws and makes the face "prognathic," an almost sure sign of intellectual inferiority, and directly connected with an unfavourable shape of the skull. The man who invented the mill was one of the greatest benefactors to his race. Condiments add to the digestibility of food and hold an important place in its preparation. Salt and pepper thus sharpen the intellect.

2. *Subversion of Sex-relations.*—There is nothing more vital to the growth, even to the very existence, of a nation than the sex-relations which it favours by its laws, customs, and preferences. Upon these depend the processes of natural selection by which the number and the power of future generations are decided through inflexible rules. If these relations, as established by the fixed natural laws of species-perpetuation, are traversed by ignorance or wilful disobedience, nothing can prevent the injury to the physical strength and mental ability of the offspring.

Such subversions of the sex-relations may be presented under five headings :

(a) Premature and delayed marriage.

- (b) Abnormal forms of marriage.
- (c) Abstention from marriage through various causes.
- (d) Licentiousness. Divorce.
- (e) Diminution of natality. Infertility.

(a) *Premature and Delayed Marriage*.—Mr. Galton, in one of his thoughtful works, remarks : “An enormous effect upon the average natural ability of a race may be produced by influences which retard the average age of marriage or hasten it.” He has illustrated this by abundant examples now through his many writings familiar to the public, his general thesis being that the wisest policy for a nation is to retard the age of marriage among the weak and to hasten it among the vigorous classes.

This is, of course, to be construed within physiological lines ; premature relations of the sexes, too early marriages, are disastrous in every respect. Statistics of European armies show that there is a far higher mortality and much more sickness among the soldiers who have married young than among single men of the same age. Certain Australian and South American tribes force their female children of immature age into marital relations, and to this is due the rapid decrease of their numbers.

(b) *Abnormal Forms of Marriage*.—Among early Semitic tribes, and to-day in parts of Tibet and

India, the custom prevails of "polyandry," in which one woman is the wife of several husbands. This sometimes arose from female infanticide, sometimes, as in Tibet, where all the brothers of a family have one wife in common, in order to preserve undivided the family property.¹

(c) *Abstention from Marriage.*—Mr. Galton, has pointed out with great force the injury worked by sacerdotal celibacy in the history of European civilisation. The commendation of the single life in man or woman as "the better part" has been by no means confined to certain sects of Christianity. Long before that religion started, this sacrifice was enjoined on the priests of Cybele, the virgins of Vesta, the Egyptian ministrants, and many other officials in Old World rites; while in the New World not only were there houses of "nuns" among the Quechuas of Peru and the Mayas of Yucatan, but the priests in those cults and even the "medicine men" of rude Northern tribes were frequently vowed to perpetual and absolute chastity.

In the struggle of modern life, and also in the greater facility for the pursuit of pleasure, of self-culture or devotion to some cherished pursuit, the unmarried person has an advantage, and hence it

¹ [An obvious gap in the manuscript occurs at this point, but one which in no way affects the general argument of the author.—EDITOR.]

is noted that marriage is either long delayed or wholly avoided. The division of a community along narrow social, financial, or religious lines greatly aids this isolation by narrowing the selection of partners for life. War, emigration, and the love of adventure prompt the males to desert remote and quiet localities, leaving the females in the majority and imbuing the males with a distaste for domestic pursuits. During the Crusades there were considerable areas in Europe where there was only one man left to seven women.

Students of psychopathic conditions have pointed out another and apparently growing cause of indifference to marriage,—that sentiment called “homosexuality,” an inversion of the sexual instinct toward one’s own sex. This may be innocent in action and emotion, when it means merely the preference for friendship in the same gender and a congenital indifference to sexual feelings; or it may progress to any degree of monosexual devotion, such as classic tradition attributed to the characters of Sappho and Heliogabalus.

Whatever the cause which leads to the presence of many old bachelors and spinsters in a community, it must be condemned by the anthropologist, because it is certain to bring about mental deterioration of the stock; and the higher the motive, the more

exalted the reason offered for such abstention, the surer is the deterioration, because it means that the class capable of such superior motives will be extinguished in the community.

(d) *Licentiousness; Divorce.*—No one will need to be persuaded that open licentiousness, the disregard of those sentiments and principles which attach in lasting unions persons of opposite sex, can have other than a detrimental effect on individual and national character. Wherever this has prevailed, the community has been weakened and its powers misdirected. Any stimulus to the sex-feeling beyond that for its physiological purpose detracts from the general energy, physical and mental ; and any indulgence of it in other than physiological methods develops degenerative tendencies.

Sexual psychopathy has been abundantly investigated of late years by Krafft-Ebing, Ellis, and other students, and its prevalence is too extended for it not to have profound effect on the ethnic mind. What is one of the worst features is the attraction that such psychopathic subjects have for each other, whether of the same or opposite sexes. It thus becomes an inherited trait, and in a majority of the cases this is easily recognised.

The question here arises, to what extent in a community the marriage tie may be relaxed without in-

jury to or to the advantage of the general psychical welfare. This practical inquiry should be decided not by religious or social prejudice, but by a study of the peculiar conditions of the community and of the application of general principles to them.

It is impossible for me here to enter into this vast and vital question ; but some of these general principles may be briefly stated.

Students of primitive conditions have reached the conclusion that neither sex in the human species is inclined to permanent sexual unions. They point out that among savage tribes, and indeed in various advanced religions, ceremonies and customs are in vogue to expiate such attachments as contrary to the divine ordinances. They further show that the forms of marriage were instituted either for selfish sensual purposes on the part of the male or for property reasons ; and that in a condition of freedom and advanced culture neither sex is inclined to regard them as durably binding.

With progressive enlightenment, bringing with it, as it must, the freedom of woman from civil disabilities, divorces increase, and only those marriages are stable in which both parties are satisfied. The result of this is constantly beneficial. Facility of separation is a potent stimulus to connubial harmony ; for the one most satisfied with the relation will always strive

to render it agreeable to the other, in order to avoid a dissolution of the tie.

Licentiousness, therefore, is not synonymous with loose marriage relations, but the reverse.

(e) *Diminution of Natality*.—There is no more certain sign of the degeneration of a race, nation, or class than a decreasing birth-rate. When it reaches the point that the deaths in its ranks exceed the births, extinction has already begun. Providing that fecundity continues normal, the onslaughts of war, famine, and pestilence may be remedied ; but when, through agencies of any description, the birth-rate sensibly falls off, there is no escape from destruction. This disaster may arise from physical, but is generally due to psychical causes, and therefore points distinctly to mental pathology in the group where it occurs.

Striking examples of this have been presented by studies of the noble families of Europe. Placed in positions where their chief aims were amusement, self-indulgence, and ostentation, their best faculties were allowed to rust and finally to decay, bringing with this the extinction of their lines.

Researches in European history show that the ennobled families of France, Germany, and England have rarely survived the fifth generation, and not more than six per cent. are in existence after three hundred years. Of 427 English noble families, but

41 were represented at the beginning of the 17th century. The patrician families who controlled the free cities of the Middle Ages are now known in history only. Scarcely a score have outlived the degenerative agencies of wealth, idleness, and indulgence.

The other extreme of the social scale is equally unfriendly to productiveness. It is popularly thought that the poor man has children if he has nothing else. But he must not be too poor. Surgeons of the Indian civil service have proved by ample statistics that the famines which periodically ravage the East bring in their train widespread and lasting infertility. Arrest of puberty and organic deterioration of the reproductive system are common results of the prolonged starvation, and prevent child-bearing.

The psychic contrast between this result and that of malignant epidemics is marked and singular. During and after famines the feelings dependent on sex are almost extinguished; while in epidemics of acute diseases, such as plague, cholera, and yellow fever, they are notably exalted, as they are also in leprosy.

There is also a class of maladies known in medicine as "dystrophic" on account of their tendency to diminish virility, and thus both lessen the birth rate and lead to morbid psychic states. Prominent among

these are malarial fevers, tuberculosis, and the later stages of alcoholism and the opium habit. By many writers the inordinate use of tobacco is believed to exert a similar effect.

In modern life, notably in France and the eastern United States, there is a very observable infecundity in certain classes, and they the wealthiest and best educated, due unquestionably to intention on the part of the married — to purely psychic causes, therefore. In the "best society" of those localities two or three children to a marriage are as many as are wanted and as many as arrive.

That this limitation is deliberate, and not the result of reproductive debility, has been shown by an application of the law of sex at birth as formulated by Dumont. This is, that when the proportion of the sexes at birth are as 105 males to 100 females, the diminished natality is voluntary; and when it is involuntary, due to disease or malformations, this ratio is always disturbed.

As statistics prove that in modern life two-thirds of the children born alive never perpetuate their kind, through death, the single life, sterility, or other reason, it is plain that intentional limitation of offspring to a number less than four means certain extinction of the family.

3. *Toxic Agents.* — The toxic agents of ethnic de-

generation belong to two classes, stimulant-narcotics and disease-germs. The former are voluntarily consumed by the individual, the latter he absorbs through exposure to insalubrious conditions. Both belong to preventable causes of deterioration.

Of the stimulant-narcotics, alcohol, opium, and tobacco are the most familiar. But they by no means exhaust the list. Everywhere and at all times man has had an intense craving for these nervines. Where the Koran forbids alcoholic drinks, the Arabs take refuge in kief and other species of hemp. The native Mexicans cull the *peyotl*, the Siberians a toadstool, the Peruvians coca.

The precise degree to which these agents have altered the intellectual and moral powers of communities has long been the theme of controversies.

This is especially true of alcohol. Professor Lapouge, certainly an unbiassed observer, citizen of a land where temperance societies are unknown, does not hesitate to call it "the most formidable agent of degeneration in modern society." Its worst effects are not the violence to which it occasionally leads or the frightful nervous diseases which its excessive use entails, but the slow hardening of the "axis cylinders" in the nerve sheaths, the immediate consequence of which is permanent deterioration of mental activity. Extended throughout a community, this

means a lessening of its energy and of its finest mental qualities. Chronic alcoholism of this kind does not materially shorten life, but it is eminently transmissible, and this soddens the stock. The white race is most exposed to these mental and nervous effects of alcohol, while the red and black races escape them in large measure.

The second class of toxic agents affecting the community at large includes the various forms of disease-germs. No one can doubt the debilitating influence of malaria on the mental faculties of the population exposed to its poisonous action. Vast tracts of the earth's surface are by it rendered incapable of sustaining the highest types of humanity. Their energy is sapped, their vitality lowered, by the insidious miasm. No race or nationality is immune. Though the white race is most liable to its attacks, the African blacks are so far from being exempt that in the more intense malarial districts of their continent nearly one-third of the natives suffer from the disease.

Marsh poison is usually confined to the lowlands. But the mountain valleys also generate a noxious agent, most unfriendly to mental growth. It displays itself in a threefold form, embracing goitre, cretinism, and deaf-mutism, the three closely related and bringing with them a positive debility of psychical powers.

The mountains have not only been the refuge of the feeble, escaping from the plains, but they have worked to render these outcasts feebler still by reducing them in stature and viability. Goitre is not confined to Alpine regions, though more prevalent there. It is distinctly hereditary, and the offspring of goitrous parents are predisposed to cretinism and allied forms of imbecility. The southern and western slopes of the Alps, the Pyrenees, the Himalayas, and the Cordilleras are especially the homes of this class of diseases.

Another series of toxic agents which calls for consideration in this connection are the so-called "constitutional diseases." These are contagious and transmissible, the poison of the blood being handed down from generation to generation.

The most noteworthy of these is syphilis. Its extreme prevalence among lower classes of the community and in some of the darker races is a present and potent cause of their mental inferiority. It is well known to specialists that children born of syphilitic parents are deficient in mental energy and physical stamina. They are liable to scrofulous symptoms and tubercular degenerations, and are deficient in ambition and love of labour.

Less widely distributed, but yet affecting whole communities, are ergotism and pellagra, due to the consumption of diseased grain, and leprosy which

is undoubtedly hereditary and vitiates the blood of whole families. Certain stocks are especially liable to it, notably the African blacks and next to them the Semites, both Jews and Arabs.

4. *Mental Shock.*—History presents many instructive examples of the destructive power of mental shock on the ethnic mind. It is brought about by some great, sudden, unexpected catastrophe, which breaks asunder the associations or institutions in which the community has lived its mental life.

Such a disruption may arise from an intensely malignant epidemic, from war, or from a natural catastrophe.

An example of the first was the frightful "black death" which swept over Europe in 1348–50, destroying nearly a fourth of the whole population. All accounts agree that the despair and desperation which accompanied such an unexampled affliction showed themselves in an abandonment of all restraint, a reckless indulgence in the wildest debaucheries, an entire disregard of social restrictions. The same is true of the "plague and famine" years, 1491–95, when, in the words of a medical historian, "the corruption of morals reached a height without parallel in ancient times."

The depressing power of sudden defeat and subjugation has been repeatedly exemplified. The "spirit is broken" of the conquered people. Only by such a

profound mental depravation can we explain why such a warlike and numerous nation as the Aztecs sank instantly to be the serfs of a handful of white conquerors.

A writer on the history of the Christian church has remarked that "every nation has its peculiar heresy." A student of mental pathology might justly add that every nation has its peculiar form of insanity. An irrational tendency is present and active in every community, ever striving to gain the ascendancy, and when it succeeds, as has often been the case in history, it makes steadily for the destruction and extinction of the national existence.

The forms of mental alienation are as various in the collective as in the individual mind, and as they are extensions of the symptoms seen in the latter, they may be classified on similar lines. I shall examine them, therefore, first as they are connected with intellectual and next with emotional disturbances, in accordance with the following scheme :

ETHNIC PSYCHOPATHIC CONDITIONS.

I.—*In the Intellectual Life.*

1. Conditions of Deficiency $\left\{ \begin{array}{l} (a) \text{ Imbecility.} \\ (b) \text{ Criminality.} \end{array} \right.$
2. Conditions of Perversion $\left\{ \begin{array}{l} (a) \text{ Delusions.} \\ (b) \text{ Dominant Ideas.} \end{array} \right.$

II.—*In the Emotional Life.*

1. Conditions of Hyper- sthenia (active motor states)	(a) Hysteria. (b) Exaltation. (c) Destructive Im- pulses.
2. Conditions of Asthenia (passive sensory states)	(a) Melancholia (Depression). (b) Neurasthenia (Exhaustion).

I. PSYCHOPATHIC CONDITIONS IN THE INTELLECTUAL LIFE—I. CONDITIONS OF DEFICIENCY.—The intellect of a group, like that of the individual, has its limits, beyond which it is not possible to educate it. This is conspicuously seen in intellects below the normal, such as in feeble-minded persons. No amount of training can cure their radical defects and make them the equals of their average associates. These are instances of intellectual deficiency. It may express itself either in some degree of imbecility or in the active form of criminal habits.

Another class do not seem below the average in general powers, may, perhaps, appear in various directions above it; but they have some twist or obliquity in their mental make-up which separates them from their fellows, usually to their detriment. In common life such persons are known as “cranks” or

"eccentrics," men of one idea and paranoiacs. ~~They~~^{They} are examples of intellectual perversion. Ethnic psychology can also supply abundant instances of this character.

(a) *Imbecility*.—To say that there are tribes or whole peoples actually imbecile would perhaps be going too far. Yet this has been asserted of some by competent observers. Mr. Horatio Hale, who was among the native blacks of Australia, related that the impression they produced on his mind was one of "great natural obtuseness, downright childishness, and imbecility." The only arguments which availed with them were "such as we should use towards a child or a partial idiot." Mr. Hale attributed this to generations of semi-starvation and malnutrition, and was so convinced of this that he believed the most favoured race would, by similar conditions, be reduced to the same low intellectual stage.

A prevailing inability to judge of evidence is common among many peoples and classes, and this is a marked sign of mental deficiency. They mistake associations of time and place for relations of cause and effect, and their reasoning is vitiated in consequence. Superstition is fostered by this mental obliquity. The casual objective relation is mistakenly assumed as the subjective necessity. This is especially common among savages, and the illiterate

classes of higher culture. It is a mark of mental inferiority tending to irrational action and confusion of thought.

In civilised communities those of the population who are thus constituted form the "dependent" class, incapable of making their own living, and supported either by their families or the state. They may thus survive and reproduce their kind, but ethnic groups afflicted with such intellectual retardation either perish or become subject to those with higher gifts.

(b) *Criminality*.—Criminality in its common forms must be classed as a condition of intellectual deficiency brought about by one or several of the causes I have already rehearsed. It is not necessary, here, to enter into the discussion as to whether a criminal is born or made, nor do I speak now of those violators of the law in favour of a higher law, the reformers, apostles, martyrs to a faith and a truth in advance of their time and place, nor of those who have yielded for a moment to some mastering temptation. I speak of the ordinary criminal who for selfish ends habitually violates the usages of the group in which he lives, and to this extent aims at its destruction.

This class cannot be disciplined into the rules necessary to the peace and welfare of the society in which they live. Researches on their psychology

show them, as a rule, defective in physical sensibility, more frequently colour-blind, mental instability is always present, vanity is exaggerated, the emotions are violent, and the general intelligence is below the average. We must regard them as pathological, rapidly approaching a self-destructive degree of degeneration. When they are numerous in a group it is a sure sign of its general inferiority.

The most advanced criminologists of to-day have returned to the opinion advocated a generation ago by Quetelet in these words: "Society creates the germs of all crimes which are committed. She instigates them, and the criminal is merely the instrument of their execution."

Translated into other words, this means that the psychic traits of any group are the direct parent of its anti-social, self-destructive, criminal instincts. To the extent that such traits are remediable the body politic is directly responsible for the violations of its own laws. If left unremedied, the ruin of the group must follow.

2. CONDITIONS OF PERVERSION.—Alienists have frequent occasion to observe cases of mental disease where all the faculties of the mind seem intact and equal to the average, except that there is a persistent irrational delusion on some single point or a few points ; or else the mind is controlled by the insistent

recurrence of a single idea, which obstinately aims to govern the whole man. The latter is known as an *idée fixe*, a fixed or dominant idea.

In ethnic psycho-pathology the same conditions may be constantly observed, and they react on the character and fate of peoples with visible power. That which passes under the name of "popular prejudice" is an example. A community will adopt an opinion, without reason, and will not permit a discussion of its merits. Any one not accepting it will be regarded as a public enemy.

(a) *Delusions*.—In primitive conditions the most common delusion is that of the identity of waking and dream-life. There is no distinction allowed in the equal reality of both, or, if any, it is in favour of the superiority of the dream-life, for in dreams the person seems possessed of powers which he loses on awakening. So highly are dreams esteemed, that many savage tribes and many nations of respectable culture have risked their gravest undertakings on the interpretation of these visions of the night.

Such a delusion is, of course, most contrary to reason and good order. On account of an inauspicious dream a Brazilian tribe will desert its village and its plantations; while if a Kamchatkan dreams that he has been given another man's wife, it is held necessary for public welfare that his dream be realised.

Another delusion, deeply rooted in the philosophy of India and which has worked untold misfortunes on its peoples, is that of the unreality of the distinction between subject and object—that is, between thought and the external world. Hence arose the doctrine that real life is *māyā*, an illusion or deception of the senses, and its aims and duties unworthy the contemplation of the true philosopher. The consequent neglect of the practical duties of life could not fail to weaken the peoples who juggled with sound reason in this manner.

A wonderful example of long-persistent delusion was the Crusades. For nearly two centuries (1095–1289) the Christian nations of Europe neglected state and domestic affairs in order to rescue the Holy Sepulchre from the hands of the infidels. All classes, from kings to peasants, fell a prey to the same obsession. It was accompanied by repeated and unmistakable signs of epidemic manias and neuro-pathias unequalled in history. Lykanthropy, in which the possessed howled and destroyed like wolves, was extremely common ; the dancing mania spread through wide areas, forcing old and young into wild gestures and crazy motions ; and, stranger than all, young children were attacked with a mad desire to leave their homes and to wander forth they knew not whither. Were they prevented, they pined and died.

These "children's crusades" began in Germany in 1212, extended through France, Switzerland, and Italy, and continued as late as 1418.

(b) *Dominant Ideas*.—The weightiest topic in universal history may possibly be the study of dominant or fixed ideas in ethnic psychology. A philosophic observer may regard each nation as the destined representative of some one idea, which, when its usefulness has ended, yields to others more germane to existing conditions; and by the successive action of all, the progress of the species is secured through the gradual elimination of those which are regressive.

Certain it is that in any group the constituent minds are controlled at a given time by some one idea common to all. This is, in one sense, a perversion of the intellect. The dominant idea assumes a magnitude out of proportion to its actual value; and by this disproportion—that is, by the undue attention it receives, others, often of equal or greater value to the group, are neglected.

These dominant ideas form the national ideals, after which the individual lines are consciously patterned, and by the practical application thus given, add to the cohesion of the group through the unification of its members. Acting under natural laws, common to organic forms as well as to societies, these ideas are the chief agents in social selection, and thus

control almost absolutely the traits and destinies of nations, as has been traced in a masterly manner by Vacher de Lapouge.

Such ideas are easily recognised in a community. A slight acquaintance with history and literature teaches us that the early Romans were exclusively possessed by the military ideal, the lust of conquest ; that the ideal of the Israelites has always been the thirst for commercial gain ; and that art was the ruling aim in the palmy days of Greece.

But the finest example that occurs to me of many different peoples being dominated by a fixed idea is seen in the votaries of the Mohammedan religion. They are bound together by one sacred language, in which one book, the Koran, lays down all law, civil, criminal, and ecclesiastical, and the expressed dicta of which set them in sharpest opposition to all who do not accept it. The religious idea, thus stimulated out of all proportion to others, has developed in them a fanatical force which at one time almost enabled them to conquer the known world, and which has since resulted in the inevitable decay of their greatest states, their literature and arts.

II. PSYCHOPATHIC CONDITIONS IN THE EMOTIONAL LIFE.—Apart from the perversions of intelligence which cloud the reasoning faculties of nations, they are subject to widespread and persistent disturbances

of their emotional lives, which frequently react disastrously on the common weal.

Following the division adopted by some competent alienists in individual cases, I may with propriety classify these into two divisions, as they represent, on the one hand, excessive, misdirected, and morbid activity, or, on the other, unhealthy depression and apathy.

i. CONDITIONS OF HYPERSTHENIA.—It is a popular error in scientific circles that diseases of the nervous system increase with civilisation. The opposite is true. The lowest stages of culture are far more pathological than the higher, in this, as well as in most respects. True that certain neuroses belong to cultured peoples; but morbid emotional states are especially prevalent in lower conditions.

(a) *Hysteria*.—This is well illustrated in the history of epidemic hysteria. It may occasionally be seen among ourselves in a hospital ward or at a camp-meeting; but such outbreaks are sporadic. They belong in the ethnic temperament of many tribes of the Malayan and native American races.

The Jesuit fathers described in vivid colours such outbreaks among the Hurons of Canada, attacking whole villages and frequently leading to their destruction. Father de Quen was quite right when he wrote: "The old saying alleges that every man has

a grain of madness in his composition ; but this is a tribe where each has half an ounce." He correctly regarded them as in a permanently pathological state.

Quite similar recitals are preserved of such outbreaks among the Guaranis of Paraguay, and other primitive stocks, notably the Malay peoples.

From the accounts of travellers it would seem, contrary to what we might suppose, that such excessive nervous sensibility is peculiarly present in extreme northern latitudes, while tropical tribes are much more liable to conditions of depression. Castren, who lived long among the northern Sibirc tribes, dwells with astonishment on their nervous sensitiveness. A sudden blow on the outside of the skin yurt will throw its occupants into spasms.

Among these "neuroses of excitement" which at times seize upon the souls of communities, none is more inexplicable, and none more fraught with consequences to world-history than the goading restlessness which has driven single tribes or groups of tribes into aimless roving. This *Wanderlust* arises as an emotional epidemic, not by a process of reasoning. It drives communities from fixed seats and comfortable homes, transforming them into migratory and warring hordes.

(b) *Exaltation*.—Under the heading of exaltation of nervous impulse the alienist includes a morbid

devotion to sexual thoughts and acts (erotomania) ; to vanity, ambition, and self-magnification ; and those states of megalomania where the patient is subject to delusions of greatness, *idées de grandeur*.

To all of these we may easily find parallels in ethnic life. They have all their analogies in tribal or national history, with consequences as disastrous as they disclose in the individual.

No more positive examples of erotic mania could be found in an asylum than those presented by the whole of some Polynesian tribes. The life of both sexes was devoted chiefly to the pleasures of the genital nerves. Societies were formed where such practices were developed into arts ; children before maturity were initiated into them ; and no mode of excitement, unnatural though it might be, was omitted or shunned.

The destructive results of such licentiousness in the history of these tribes, already extinct or nearly so, need not be insisted upon. But why seek to demonstrate it from remote times or savage lands ? Within a year a philosophic student, from a wide range of investigation, has attributed chiefly to the same pathological cause the deterioration of the leading so-called Latin nations of Europe in the last two centuries. In them, says Signor G. Ferrero, the sex impulse develops earlier, and absorbs and wastes

the life energies more than in the Teutonic nations, yielding to the latter the superior place in the struggle for existence.

Another and familiar exemplification of this neuro-pathic frame of the ethnic mind is that exaggerated national boastfulness known (from a soldier under Bonaparte) as *Chauvinism*. It is patriotism passed into mild dementia; so well known that it has a special name in English also, *Jingoism*. The profound conviction that our own country—whichever that may be—is the greatest in the world, leader of all in intelligence, power, culture, and vigour, is invariably and everywhere a mental delusion, a type of megalomania. Such a notion prepares the way for increase of ignorance and self-esteem so blind that it is sure ere long to fall in the pit ever open for fools.

(c) *Destructive Impulse*. The passion for wanton destruction may seize equally upon a person or group. It may be directed toward inanimate objects or against human life. John Addington Symonds gives a thrilling sketch of the monster, Ezzelino da Romano, Vicar of the Emperor Frederick II., in northern Italy (about 1250). His own passion was the mutilation, torture, and murder of men, women, and children. His inordinate cruelty and repeated massacres led to his becoming the hero of a fiendish cycle in Italian literature.

We may call him, if we wish to palliate his monstrous deeds, a monomaniac; but, as Symonds says, if we thus excuse him "we shall have to place how many Visconti, Sforzeschi, Malatesti, Borgias, Farnesi, etc., in the list of maniacs?" No, it was an ethnic tendency of Italy at that period, and for long afterwards, and could be illustrated by scores of traits from popular as well as princely life.

The mania for murder which seized the Parisian populace in 1793 was a true pathological outburst. No sense of patriotism thrilled the crowds who ran by the tumbrils and surrounded the guillotines. It was hæmatomania, the blood-madness, that was upon them.

The suicidal impulse occasionally assumes an epidemic form which arises from conditions of the ethnic life. The aborigines of Cuba when enslaved by the Spanish conquerors practised self-destruction on a scale which contributed much to their prompt extinction. In the city of Frankfort-on-the-Main in the last century suicide became so frequent among women that the dead bodies were suspended by the feet in order to check the impulse in the survivors.

In a less degree the destructive passion directed against objects, or figuratively against institutions, known as *iconoclasm*, is often a mere outburst of unreasoning emotion. Its energy is misdirected and

fruitless. What was the result of that which during the eighth and ninth centuries raged in Constantinople and Asia Minor? It altered image-worship into picture-worship, nothing more.

2. CONDITIONS OF ASTHENIA.—In contrast to the repeated explosions of nerve force which give rise to the active motor states of ethnic dementia I have been considering, are those characterised by a loss of reaction to stimuli, by passive, merely sensory, conditions.

These are of two varieties, well marked in their differences, each highly significant in its ethnological and historic relations. The one is allied to melancholia, being marked by depression or inaction of the psychic forces, the other by their exhaustion, by incapacity for reaction to ordinary stimuli.

(a) *Melancholia*.—The consequence of mental shock, I have already pointed out, is to bring about a sort of mental paralysis, a listless, apathetic state; and this I have illustrated by some examples.

A touching one is recorded of the Greek colony which erected the city of Pæstum on the Tyrrhenian Sea, whose stately ruins still attract thousands of visitors annually.

A clearly ethnic type of melancholia is *nostalgia* or homesickness. Of course it is found in some degree in all lands, but with some peoples, notably

dwellers in high northern latitudes, the Lapps and Eskimo, it is severe and general. If removed from their surroundings they mope and die.

(b) *Neurasthenia*.—Diseases of nervous and mental exhaustion belong exclusively among nations of advanced culture. There are those which have not merely increased, most of them have originated in stages of high civilisation ; not, as some have falsely argued, from conditions essential to culture, but to errors and misdirections in that culture. As, in all rapid motions, slight deviations entail more serious consequences than when motion is slow, so, in the rapid progress of modern times, slight neglects of hygiene bring about more serious results than in ruder countries.

This explains the relative increase of some forms of insanity, of suicide and criminality, and the appearance of new maladies, such as progressive paralysis, in civilised centres. They are due to exhaustion of the nerve centres in those who are not adapted to bear the strain of contemporary competitive life, or who, if able, fail to direct their activities in successful channels.

Another evidence of exhaustion, one which properly exercises the attention of the student of modern life, is the progressive distaste for the sex relation, especially among women. The consequences of this

mental attitude are the prevalence of spinsterhood and the limitation of families in marriage, to which I have already referred. The attraction of the "higher culture" and of their new facilities for seeing and enjoying liberty have led to atrophy of the maternal instinct and of the desire of marriage. This can have but one result,—the diminution and final extinction of the group in which it prevails.

There is also such an ethnic malady as moral exhaustion. After a period of intense but ill-regulated ethical enthusiasm there often follows a reaction, when all ethical principles are thrown to the winds. This has been plausibly explained by Dr. Laycock as an overstimulation of the brain cells most closely connected with this class of sentiments, with consequent exhaustion in transmission to the next generation. "The fathers have eaten sour grapes and the children's teeth are set on edge."

The bigotry of Puritan England in the 17th century was followed by the laxity of the Restoration.

PART II

THE NATURAL HISTORY OF THE ETHNIC MIND

INTRODUCTION

ALTHOUGH, as we have seen, there is no common measure of Mind and Matter, the connections between the two are so intimate that, in organised beings, any change in the one entails a corresponding change in the other.

This is a principle which has long been accepted in the Science of Man. A quarter of a century ago Professor Schaffhausen expressed it in these words : "One of the weightiest doctrines in Anthropology is the constant correlation between intellectual capacity and physical organisation." That branch of Anthropology called Somatology is devoted to the investigation of the human body, its measurements, structure, and functions, as they differ in individuals, groups, and races, for the purpose of defining and explaining this correlation.

The expressions of the individual mind are largely the reflex of its environment, of the external impulses, stimuli, and conditions which surround it. These are physical, measurable, quantitative, and

therefore within the province of the "natural" sciences.

In their relation to the individual, they mostly belong to the domain of "experimental" psychology; but as they influence the group and decide its constitution they form an important branch of ethnic psychology also.

The natural history of the Mind is chiefly the study of its environments, its *milieu*. But that term is to be taken in its widest sense.

The nearest environment of my mind is my body. Indeed, it is the only environment of which I have positive knowledge. As John Stuart Mill well said, "I know my own feelings with a higher certainty than I know aught else."

Hence the physical constitution of the individual is that which has primary importance.

That may be considered first as an individual question, without going beyond the circumstances of the personal life and health, a purely *somatic* investigation. We may next inquire how many of his peculiarities the individual owes to his ancestors, which will bring up the questions of heredity, hybridity, and others, including mental as well as physical traits. His debt is large to these, but still larger, say some writers, to his contemporaries, the associates with whom he has been thrown from

birth. These are his "people," the "group" of which he is a member. He is modified in a thousand ways by this "demographic" environment.

All these—his ancestors, fellows, and his own body—are "human" influences. Beyond them lies the great world of other beings and of unconscious forces, the animals and plants, the land and water, the clime and spot, which make up his "geographic" environment. How dependent is he upon these! How utterly they often control his thoughts and actions!

Each of these I shall endeavour to estimate in their influence on the individual, not as an individual, but as a member of a group; and on the group itself, as an independent, psychic entity, nowise identical in character with any individual.

CHAPTER I

THE INFLUENCE OF THE SOMATIC ENVIRONMENT

THE human body is an “organism” each part of which is in vital relation to the whole, and is influenced by the condition of every other part. This is true of function as well as structure, for function, after all, is merely the term we give to structure in action. Mentality, psychical activity, is a function, and, like all others, is organically conditioned by the whole organism and its several parts. To understand the influence of the body on the mind, therefore, we should consider in such relation each of the physiological “systems” which make up the organic life. For my present purpose, however, it will be sufficient to select those most closely related to mental activity.

The Brain.—The learned of all times have sought to find “the seat of the soul.” Primitive men generally placed it in the liver or in the heart; but anatomists have been long agreed that it must be somewhere in the head. The latest word from them is that it

resides in the nerve cells of the grey matter of the brain, in the number and activity of the "pyramidal-neurons" there situate, and probably in their capacity to send out shoots or branches.

This intimate, ultimate, structure and potency establishes the difference between the intellectual faculties of species and individuals. In the lower animals these cells are few and scattered, and their proliferations short and simple. In man the cells increase in number and their extensions become long and complex. They are more abundant when the grey matter is ample, as is the case where the convolutions are intricate.

Up to a recent period it was supposed that the weight or size of the brain was the chief physical element in mental superiority. It is now known, that has little to do with it. Not a few men of distinguished parts, such as Liebig, Gambetta, Tiedemann, etc., have had brains decidedly below the average in weight, while, on the other hand, many with large brains have led unimportant lives. This is also the case with races, for although the African negro is below the European in his cranial capacity, the Fuegian, decidedly below the African in mental development, has a brain larger than either of the other races. Obviously, both the cubical content and weight of the brain depend much on the general size, stature, and

weight of the body ; and no one has been found who pretends that the biggest man is also the ablest.

We are almost compelled, therefore, to accept as correct the conclusion reached by Lapouge and others, that not the size but the molecular constitution of the brain is finally decisive of intellectual power ; and this is a trait which up to the present time has eluded analysis.

This is not inconsistent with holding that where other proportions are the same, a larger, more complex brain is generally significant of higher mental powers ; and that a well-balanced skull, with orthognathic features and moderate facial development, are indications favourable for the psychical possessions of the individual or the group.

The *shape* would seem to be more significant than the weight of the brain. Of all the elements of gross cerebral anatomy it appears to be that most indicative of mental power.

This is a recent discovery of craniologists, the entire meaning of which has not yet been worked out. It is due to the researches of Ammon and Lapouge within the last decade, and to the anthropologist promises solutions of various obscure problems in the cultural growth of the species.

These observers have ascertained, by many thousand measurements on the living and the dead, that

those persons who, as a class, are best adapted to the high and continued strain of modern city and competitive life, have skulls in that shape termed "subdolichocephalic," which means that their brains have a prevailing and fixed spatial relation of their parts, a relation, no doubt, which is the most favourable to the general and prolonged activity of those nerve cells which we know are the seat of psychical function.

Such persons in youth stand at the head in the school, they take the prizes in examinations, they carry off the honours in intellectual contests, they are leaders in the learned professions, they are the self-created "upper class," and, what is equally noteworthy, in the unhealthy atmosphere of great cities they outlive their associates with other shapes of brain.

But these observers also note that while these somewhat long-skulled persons have such intellectual and even physical advantages in the struggle for existence, they are deficient in others, which, under some circumstances, are even more necessary to success.

The same extended series of measurements and comparisons show that those whose brains are rounder in form—more brachycephalic—prove generally superior in technical skill, in industry, and in

perseverance. They are less adventurous, they lack imagination and the stimulus of the ideal, they are narrow and formalists; but they shine in the bourgeois virtues of capacity for steady work, of devotion to hearth and home, in respect for settled government, stable laws, and ancestral institutions.

This favourable brain shape is, in Europe, often correlated with the blonde type, light hair, and grey or blue eyes; but whether this is anything more than a local peculiarity remains in doubt.

Ammon has pointed out, however, that these traits, where they have been united in history, have marked a daring, energetic, progressive stock, one fertile in bold explorers, conquerors, and thinkers. Such was the type of the ancient Aryans, who became the ruling race wherever they carried their victorious standard, "not through numbers, longevity, or fertility, but through the consequences of 'natural selection.'" Professor Lapouge has further shown that in southern France, where the local aristocracy rose from the same stock as the peasantry by superior personal ability, a notable difference is observable between the skull-shapes of the two classes, the crania of the "gentlemen" being considerably longer in proportion to width than those of the peasantry.

They are well suited for village life and agricultural occupations; but, subjected to the stress and

strain of great cities, they die out in the third generation.¹

When it is remembered that whole nations, stocks, races, are characterised by the prevalence of one or other of these skull-forms, it is at once seen that a physical basis is here presented for ethnic psychology worthy of attentive study. These authors have, in fact, applied their conclusions in this direction; but, concerning themselves chiefly with the mixed populations of European states, have been principally occupied with the "social selections" which may be attained in such communities from this cause.

While the skull-form thus becomes distinctive of brains possessing or lacking certain faculties, it must not be supposed that this relation is an essential one. The brain will perform its work without reference to the shape of the skull. This is proved by the many tribes who have artificially deformed the head in obedience to fashion or superstition. In America it is noteworthy that the crania thus malformed to the utmost degree are precisely those of the nations of the highest civilisation—the Mayas of Central America and the Quechuas of Peru.

¹ These deductions were based on many thousand observations in France, Switzerland, and Germany, and are undoubtedly true for the places and periods in which they were conducted; but it has not been shown that they are generally applicable in other areas. Some observers (Livi, Lombroso) have not accepted them for Italy. The opposition they have met in France from Fouillée and others is merely sentimental.

The Nervous System.—Professor Haeckel, in his lectures on “anthropogeny,” lays down the maxim, “All soul-functions or psychical activities depend directly on the structure and composition of the nervous system.” This is illustrated by the biological development of the nerves of special sense,—of sight, hearing, taste, and smell. Originally they were all indifferent touch-nerves, and by slow degrees in indefinite time developed their specific reactions.

They are yet by no means the same in all persons, as everyone knows. They also differ widely in groups, nations, and races. The study of the “reaction-times” of the principal races has occupied Cattell, Bache, and other psychologists. The sense of taste is notably different. An Eskimo finds pleasure in castor oil and a Kamchatkan in eating rotten fish. The Annamite is almost insensible to pain from wounds, but suffers intensely from moderate cold and is acutely affected by odours. The Fuegian can sleep naked on the snow with comfort, but is easily disturbed by noises.

The intellectual differences between both individuals and races arise not so much from relative mental capacity as from varying reaction to mental stimuli. They all have pretty much the same power to pursue knowledge, if they choose to exert it. The difference is one involving the general nerve-tracts. Perception

and attention were the forces which in the history of organisms developed all the special senses from nerves of touch; and the growth of the intellect is consequently closely conditioned by the qualities of nerve-sensations.

The Osseous System.—To be asked to define the ethnic life of a group from the bones exhumed in its cemeteries would seem a hopeless task. Yet it is possible, for on the osseous system the whole bodily structure is built up, and the activity of the brain is conditioned.

Races differ in their skeletons. That of the African black is heavy, the flat bones thick, the pelvis narrow, and presents many peculiarities which are termed "pithecoid" or ape-like. Contrasting with these are small-boned, delicately formed skeletons of the Indonesians and Japanese, resembling those of the female in other stocks. It would not be difficult to bring the ethnic into relation to these skeletal traits.

Professor Hervé, of the School of Anthropology of Paris, has argued that the presence of the "Wormian bones" and the complexity of the cranial sutures are a measure of the rapidity of brain-development, and consequently a criterion of mental activity in a stock. This can scarcely be accepted, for we are not sure that the rapidity of bone-formation bears any ratio to the growth of the brain cells; but it is not rash to

argue that a people whose bones are largely diseased must have lived in unhygienic conditions, and had become degenerate in mind as well as body.

Such is the case with the skeletons of that wholly unknown tribe who once densely peopled the Salt River valley in Arizona, and of those who dwelt near the great cemetery of Ancon in Peru. About one-third of the skeletons present pathological features indicating long-continued defective nutrition or widespread disease. No wonder that both stocks perished off the earth. Though at one time singularly advanced, they had sunk into complete degeneracy.

Muscular System; Height and Weight.—There is a relation between height, weight, and mental power, true for the individual and the group. This is not mysterious, as all three depend upon nutrition. Physiologists lay down ratios of height, weight, and age which are requisite to the highest health, mental and physical.

We may go further, and say that any marked aberration from the average of the species in these respects is accompanied by some equally noticeable psychical peculiarity. Dwarfs have often acute minds, but rarely deep affections.

Inferior stature is often an ethnic trait. The central African pygmies, the Lapps, and the Bushmen are familiar examples. Mr. Haliburton has recorded

others in the Atlas and Pyrenean mountains; and Dr. Collignon reports the diminution in height in some districts of central France.

The explanation of all is the same—lack of proper, regular, and sufficient alimentation. They are, as the Germans say, *Kummerformen*, products of wretchedness. The shortest of the Bushmen are also the most miserable—those living amid the barren sands of the Kalihari desert.

The reaction of such prolonged semi-starvation on the functions of the brain cells leads to psychical dwarfishness. None of these undersized stocks have gained a position in history or contributed to the culture of humanity. They have been unequal in physical strife, and have been forced to the wall.

Reproduction.—The reproductive function in its various manifestations exerts an enormous influence on the individual mind, and exhibits broad racial and ethnic distinctions. Its power is scarcely less operative in the fate of nations than of persons, and its reflection in the mind of groups deserves closest attention.

The period of puberty changes widely the direction of the thoughts, and the character frequently undergoes a complete transformation. Children previously studious lose interest in their lessons, while others pursue them with greatly increased devotion. The

sexual emotions, which mark the epoch, may absorb the whole being or merely stimulate it to higher efforts.

The age at which puberty begins varies, following the general law that the higher the annual temperature the earlier in life does the change set in. This becomes of psychical interest when it is added that the earlier the change the more intense and permeating are the erotic passions ; the more do they compel to their sway the other emotions and the intellect.

Only two motives, observes Professor Friedrich Müller, can induce the Australian or the typical African to prolonged labour,—hunger and the sex passion. Civilised communities are measurably lifted above the immediate struggle for food, but not in the least above the other impulse. If you could learn the prime motive, says Dr. Van Buren, of the presence of the crowds of men on Broadway, you would find ninety per cent. of them are there through sex feeling.

The sentiments of love, of marital and parental affection, of family life, control mankind more completely than any other motives. These are physical, personal feelings, and to that extent narrow and in conflict with many which are broader and more altruistic. Few persons can advance beyond them, and the collective mind is obliged by the laws of its

own existence to register them as of the very first importance.

The power of a group is, other things being equal, in proportion to the size of the group, and its increase in numbers is in geometrical proportion to its fecundity, provided the food-supply remains sufficient.

These are two closely related and essential factors to advance, and have been so felt from man's earliest infancy. The complicated systems of marriage and relationship in vogue among the Australian and other rude tribes arose from the effort to adjust the birth-rate to the available amount of food. Many of the forms of marriage arose from the same consideration. In polygamous countries most men are monogamous because they cannot keep large families. Legal infanticide, exposure of the new-born, as in China, is another effort in the same direction. Where such measures are not legalised they reappear in other guises. Artificial abortion and intentional limitation of families are frequent in France and the United States. They are outcrops of a sentiment of self-protection which has been familiar to the species from its beginning.

Sex feeling belongs distinctly to the animal and emotional side of human nature. Where it is the dominating motive, neither individual nor group can attain the highest development. This is noticeably

the case in the African. Coloured children in our public schools are equal to their white associates up to the age of puberty. But that change is more profound in the African than in the European constitution. After it has occurred, the difference in favour of the white children becomes very apparent. Their mental world is not so invaded by thoughts of sex, and they are more inclined to study.

In a less degree, as I have before remarked, the same contrast exists between the Teutonic and Latin peoples of Europe, and has been acknowledged to have resulted in decided advantages for the former.

Virility—that is, the reproductive potency in the male—bears no relation to the strength of the erotic passion.

In some the passion of sexual love is little more than an appetite. Satisfied, it is indefinitely quiescent, not entering into the general life; or, if it at times fires the emotions, they are easily restrained or banished by the exercise of other mental powers. This has been the case with many eminent men of notoriously ardent temperaments but never subdued by them (Byron, Goethe).

It is also an ethnic trait, a characteristic of the Teutonic blood, in sharp contrast to the so-called Latin peoples. With the latter, as is obvious from the literature, the erotic feeling is an enduring and

overmastering passion, colouring the intelligence and often absorbing into itself the activities of the life.

As virility in man, so fecundity in woman has no relation to sex feeling ; or, if any, in a reverse degree.

The famous calculations of Malthus, which cannot be disproved, and which have been confirmed by the latest statistics, show that this fear of population transcending the food-supply is real and ever present. Where it is not immediate, as in modern life, it is nevertheless near and visible in the division of the parental property among a large family of children ; in the increased difficulties of properly educating such a family and giving each a proper position and start in life ; and in providing for such as are feeble or incompetent. This effort, extended throughout a community, means more intense competition, a more bitter struggle for property, a more constant occupation with sordid details, to the neglect of reflection, study, and abstract thought.

Reproduction, therefore, to its utmost limits, would be of no advantage to a community, but decidedly deleterious. Its effect on the collective mind would be lowering, as it would centre the general attention on material aims and personal interests.

Nor is the individual who would direct his activities by the highest motives at all compelled to increase his kind. The accessory demands upon his time and

powers which such an action usually entails, would probably hinder him in his efforts. Darwin forcibly stated this in his *Descent of Man*. He imagines a man who, not compelled by any deep feeling, yet sacrifices his life for the good of others through the love of glory. "His example would excite the same wish for glory in other men and would strengthen by exercise the noble feeling of admiration. He might thus do far more good to his tribe than by begetting offspring with a tendency to inherit his own high character."

If this is true of one governed by a motive confessedly not the highest, how much more true of him or her whose soul is fired with a devotion to the truth of science or to the welfare of the race!

Feminism.—The physical contrast of the sexes belongs to all mammals, to birds, and to most of the animal kingdom. The female is generally smaller, lighter, with lines more graceful and delicate. This is true, as a rule, in all races of men and held good for the earliest tribes whose skeletons have been preserved. Yet the contrast in man is so far from positive that the anatomist knows no criteria to establish the sex from the bones except the more obtuse angle of the rami of the pubes in the female; and even this is obliterated in some branches of the human race, the Indo-Chinese, for example, where the rami meet in both sexes at about the same angle (Hervé).

The tendency to "feminism" is not unusual in the white race as an individual peculiarity; and is especially prominent as a racial trait in the Asiatic or Mongolian branch of our species. They have sparse beards, little hair on the body but much and strong on the head, and the features of the sexes are similar. In many respects they display feminine traits of character, being industrious, sedentary, and peace-loving, receptive but not originative, ruled by emotion, and easily brought under the influence of nervous impressions.

Women have much less variability than men; they are precocious, and their growth more rapid, but the arrest of development arrives with them sooner. They remain near the child type throughout their lives.

Mr. Havelock Ellis has argued that for this reason they are nearer the future type of the species, and that the results of modern civilisation are to render men more feminine in occupations, character, appearance, and anatomy.

It would be more correct to say that as civilisation advances the distinctions between the sexes erected by conditions of lower culture tend to disappear, each sex gaining much from the other without forfeiting that which is peculiarly its own.

The masculine woman and the feminine man are

erratic, often degenerate types. The tendency to "homo-sexuality" (or to "non-sexuality") has appeared from time to time as an ethnic trait. It was notorious in ancient Greece and mediæval Italy, and in both cases presaged deterioration.

The Vital Powers.—Health is one trait; tenacity of life another. Feeble and sickly people sometimes reveal a surprising vitality; others, who are hale and athletic, succumb to slight attacks. The American Indian, when he falls ill, gives up and dies; while Europeans, though increasingly requiring medical attention, are growing in longevity.

This physical fact has a noticeable bearing on ethnic psychology. Where the old survive, the property and the management of society usually rest in their hands. The traits of age are reflected on the collective mind. It is cautious, perhaps to timidity, slow in action, avoiding strife. These are the traits of Chinese diplomacy, in which country not only is longevity considerable, but the respect for the old passes into veneration.

As a rule, the lower forms of culture are associated with the shortest lives. The Australian is a Nestor who reaches fifty years. Early maturity and early decay mark inferior and degenerate stages of society. Hence they are guided by inexperienced minds and by the emotional characters of youth.

Temperament.—The ancient physicians had much to say about “temperaments,” classifying them usually as four, the sanguine, biliary, nervous, and phlegmatic. Both modern medicine and psychology have rejected these as a basis of classification, but acknowledge that there lies an important truth in the ancient doctrine.

Professor Wundt, for example, defines temperament from the psychological standpoint as “an individual tendency to the rise of a certain mental state,” and Manouvrier, recognising the intimate relationship of mind and body, explains it as “an ensemble of physical and mental traits arising from fundamental constitutional differences” in individuals.

Confining myself to the psychological aspect of temperament, I should call it the personal mode of reaction to different classes of stimuli. It is the general disposition of the mind, the individual way of looking at things, *l'humeur habituelle*, and is independent of sentiments, ideas, or knowledge. It is the psychic resultant of the whole organic life of the individuals. In this sense, the distinctions of temperaments are justified, as they depend on the dominance of one or the other of the physiological systems—circulatory, alimentary, nervous, genital, etc.—in the economy.

Various writers (Manouvrier, Ribot, Kant) have

adopted as the measure of temperaments and the principle of their classification, the one standard of *energy*; in other words, molecular change. They speak of sthenic and hypersthenic temperaments, active and passive, etc.

I doubt if this is correct in physiology, and it is certainly not so in psychology. Men of all temperaments may be equally energetic, equally active in life-work. That is an old observation. The measure or standard should be, not energy, but that general mental condition called *happiness*. That is the popular distinction, and it is the true one. When we speak of a sanguine, bilious, cheerful, gloomy, temperament, we refer to a general and characteristic mental attitude, with reference to individual happiness.

Rabelais could joke on his death-bed, but Byron, young, rich, and courted, could find no theme for song but sorrow.

The phlegmatic temperament is supposed not to enjoy keenly, but also not to suffer keenly. The sanguine temperament is not easily cast down by adversity, while the bilious or melancholic person is little capable of appreciating the joyous side of life.

These ancient terms may not be acceptable to modern science; but the truths on which they are based are acknowledged by all authorities.

They interest us here, because a group has its tem-

perament as much as an individual, drawn, no doubt, from that prevailing among its members, but noticeably strengthened by the inherent forces of ethnic psychics.

The recognition of this is seen in common parlance when we speak of the phlegmatic Dutchman, the gay Frenchman, etc.

Such popular characterisations may not be accurate, but they serve to show that the fact of a national temperament has unconsciously made itself felt.

It does not seem dependent either on nutrition, geographic position, or history ; and it is hereditary and constant. Thus the Eskimos, living amid eternal snows, with a limited diet and a desperately hard struggle for existence, have a singularly cheerful disposition, loving to talk, laugh, and indulge in pleasant social intercourse. On the other hand, the Cakchiquels of Guatemala, living amid the most beautiful and fertile tracts in the world, are chronically morose and gloomy. Their temperament is reflected in their language, which, as the late Dr. Berendt remarked, is as singularly rich in terms for sad emotions as it is poor for those of a joyous character.

There is no doubt that a cheerful mental disposition is in itself a defence against the attacks of disease. Seeland, in his anthropologic studies of the

question, found that persons of a cheerful temperament are, in an extended series, physically stronger than those who are melancholic, in the proportion of 148 : 135 ; though whether this should be regarded as cause or consequence is open to construction ; and, while fully recognising the actuality of national temperaments, he adds that an analysis of them, with a view to defining their causes, is still far from practicable. The important conclusion which he reaches, however, is that the happier temperament corresponds to the higher degree of health, and that, in comparison, that which tends to the melancholic is morbid, a pathologic product, an indication of degeneration.

Regarded as a national question, we derive from this that the calm and the cheerful temperaments are those which promise most success and permanence.

CHAPTER II

ETHNIC MENTAL DIVERSITY FROM COGNATIC CAUSES

In the last chapter I have considered the individual in his relation to the group simply as an isolated unit, with his own powers and weaknesses.

Both of these, however, he derives largely from his ancestors, through the fact that he is born a member of a particular species, race, and family. Such traits react powerfully on his mental life, and, indeed, in themselves force him into relation with a human group, his cognatic or kindred associates.

The ethnic psychologist must therefore devote to them insistent attention. For convenience of study the facts may be grouped under three headings, Heredity, Hybridity, and Racial Pathology.

Heredity.—In body and mind, the child resembles his parents, the individual his ancestors. This is the principle of fixity of type, the permanence of species.

Neither in body or mind is the child ever exactly

like his parents or either one of them. Differences are always visible. This is the principle of constant variation, at the basis of the unending transformations of organic forms.

On these two principles rests the law of Evolution, which may be progressive or regressive, that is, toward greater complexity and specialisation or toward simplicity and homogeneity. Of these two principles, one is real, the other merely apparent,—the negative or minus quantity of the other, as cold is to heat or darkness to light. Which is the real?

The question is not idle, for upon its correct decision depends the accuracy of our views of organic life.

So long as the doctrine of the immutability of species was accepted, everyone believed in the fixity of type as the prime law. When Lamarck and Darwin had undermined that position, and up to a very recent date, the two principles were considered somehow equal, dual conflicting forces, the fixity of type being a passive result of the action of the "environment."

The unphilosophical character of such a conception of facts has now become apparent, at least to a few. The true positive of the two forces is change, variation. This is the one, fundamental, essential characteristic of living matter. Every element of an

organism that is not ceaselessly changing ceases to be living, vital.

"Hereditary," therefore, is a merely negative expression. It means a diminution, not a cessation of change. Inherited traits are those in which the rate of variability has been so reduced that they reappear by repetition in several or many generations. Every one of them began in some single individual, was due to a definite exciting cause, and was transmitted by the route of reproduction. Hence inherited traits have been properly termed "secondary variations."

The long discussion whether acquired characters can be inherited has virtually been decided in favour of the opinion that every character, whether racial or specific, was originally acquired by a single person or persons and transmitted by them. The data of pathology admit of no doubt on this point, and pathology is but one of the aspects of general organic development.

That not every acquired character can be transmitted goes without saying; and it is equally true that hereditary traits vary widely in their capacity for survival. So evident is this that they have been classified by observers into "strong" and "weak" traits, the latter betraying a feebleness of self-perpetuation compared to the former.

I have been discoursing of physical heredity and

some of its observed laws. This has not been beside the mark; for I repeat that the correlation between body and mind is absolute. Psychical traits are passed down from generation to generation hand in hand with physical peculiarities. Men are what they are in good measure because they are born so. About this the students of heredity are unanimous and positive. Hence the necessity in ethnic psychology of learning the laws of physical heredity and applying them to the history of the mind.

An example will illustrate this.

There is a curious manifestation of transmission called "homochronous" heredity. The adjective signifies that a trait which appears first at a certain age in the parent will also appear first at about the same age in the offspring. A familiar physiological example is the date of the beginning and the end of the reproductive period in women. Inherited tendencies to disease will recur in the offspring at the age they revealed themselves in the parent. This is strikingly true of mental traits, especially those which are degenerative.

Even in the mixed populations of modern states, the connection of mental with physical heredity is manifest. Commenting on the population of France, Dr. Collignon observes: "To the difference of races, a purely anatomical fact attested by the form of the

skull, the colour of the eyes and hair, and similar bodily traits, there corresponds a cerebral difference, which shows itself in the prevailing direction of the thoughts, and in special aptitudes." These contrasts are shown by the statistics of Jacoby, who examined the birth and lineage of the most eminent men of France in all departments of activity. He found that the Normans were decidedly ahead in the exact sciences and practical affairs, while in poetry, romance, and works of imagination in general the people of the Midi were far superior to them.

Heredity is believed to present itself in another aspect, which has excited much attention. I refer to that form of it called "atavism" or "ancestral reversion," or "retrogression," in which a child "takes after," not his immediate parents, but some remote ancestor; even, as has been often claimed, so remote as beyond the limits of our own species. Such traits have been called "pithecoid" (ape-like) reverions, as they are alleged to be derived from some four-footed precursor of man, an ape, or even a lemur.

Evolutionists whose enthusiasm transcended their discretion have pointed out many such features in the human skeleton. A few years ago (1894) I gathered these together, and in a paper read before the American Association for the Advancement of Science, I undertook to prove that these features can be

satisfactorily explained by mechanical and functional processes acting in the individual life or in that of his immediate ancestors, and that we have no occasion to appeal to hypotheses of descent, which have, at least, never been proved. Other American anatomists (Bowditch, Baker) endorsed and supported by further evidence this position, so that physical anthropologists, in our country at least, have said less about atavism than formerly; and the final blow to it has been dealt quite lately by a Dutch writer, Dr. Kohlbrügge. He has established the thesis that "all so-called atavistic anomalies are meaningless for the race-type. They are brought about by arrests of development or general variability. They depend on disturbances of nutrition, leading to excess or deficiency of productive energy, presenting a deceptive appearance of progressive or retrogressive evolution."

The consideration of these questions in physical heredity is necessary in psychology, whether individual or ethnic, not merely because the laws of physical run parallel to those of psychical life, but as well for the valuation of those expressions about "men recurring to their brute ancestors" in habits or feelings, so frequent in popular literature.

Hybridity.—The intermixture of human races or stocks, human hybridity as it is sometimes called, has been recognised by all anthropologists to be a prime

factor in ethnic psychology, in the psychical history of Man.

But, strange to say, the opinions about its results could not have been more divergent. On the one hand we have a corps of authors, Gobineau, Nott, Broca, Hovelacque Hervé, etc., who condemn the admixture of human races as leading inevitably to mental and physical degeneration, infertility, and extinction.

In direct contradiction to them we find the not less distinguished names of Quatrefages and Bastian, who maintain not only that such "miscegenation" is harmless, but that it has been the main factor of human intellectual progress! That owing chiefly to it certain tribes and nations have by unconscious selection drawn to themselves the strong qualities of many lines of blood, and thus won the foremost place in the struggle for existence. This was notably the opinion of Quatrefages, who defended the thesis, "In race-mingling the crossing is unilateral and is directed under unconscious selection toward the superior race."

This is supported by many well-known examples. In our own country, the superiority of the mulatto to the full-blood negro is proved by history and is familiar to all observers; and Dr. Boas has shown by statistical researches that the half-blood Indian is

mentally superior to his companion of pure lineage, while the half-blood Indian women, instead of revealing diminished fertility, average two more children to a marriage than their red sisters of unmixed lineage.

But it will not do to ignore the array of facts of contrary tenor which has been marshalled to show that in divers instances the result of race-mixture has been disastrous.

Many of these may easily be explained by the unfortunate social condition of children in such unions, mostly illegitimate, or at odds with extreme poverty and its ill surroundings. If they do inherit an increased ability, it is, under modern conditions, more apt to be directed against than in favour of the social order.

After all such allowances, there remains a residue unexplained by them, and inconsistent with the general theory of advantage in race-intermixture.

The solution of this problem is to be found in the operation of an obscure but certain law of heredity which has been demonstrated by the best modern observers.

This reads that in the struggle for transmission between contrary characteristics in the parents, any trait, mental or physical, may be passed down separately, *independently of others*.

Thus, on the physical side, the father may have red, the mother black, hair. The children will in-

herit, not a blended colour, but some the red, some the black hair. Or, let us say, one parent has marked musical ability, the other none. Some of the children will have as much as the gifted parent, the others be devoid of the faculty.

It is essential, also, to remember that it is the inferior race only which reaps the psychical advantage. Compared to the parent of the higher race, the children are a deteriorated product. Only when contrasted with the average of the lower race can they be expected to take some precedence. The mixture, if general and continued through generations, will infallibly entail a lower grade of power in the descendant. The net balance of the two accounts will show a loss when compared with the result of unions among the higher race alone.

This consideration has led a recent writer, Dr. Reibmayr, to a theory of ethnic mental development which merits close attention.

A family, tribe, caste, or race, to preserve and increase its faculties must sedulously avoid intermarriage with one of inferior gifts. The value of "breeding in-and-in" is familiar to all interested in the improvement of the lower animals. This was attained in primitive life by the tribal law of endogamous marriages, by which a man must take his wife within the tribe, but not of his immediate blood.

The superiority which this developed led to the subjection of other tribes, and this, through capture and enslavement of the women, to intermixture of blood, with its above mentioned first consequences : deterioration of power in the captors, and, next, elevation of the lower, conquered tribe.

The former was sometimes counteracted by the maintenance of purity of blood in a portion of the community, which thus became the ruling class ; and if this did not take place, the tribe itself soon fell beneath the sway of some neighbour which had maintained its lineage more purely.

Thus, says Dr. Reibmayr, the history of human mental development is, in fact, the history of human hybridity and its necessary consequences.

Thus it appears that the reciprocal action of these two genetic processes, the one of close and closer interbreeding, the other of wide and wider intermixture of blood, is the prime element in modifying the psychical faculties,—in other words, in creating and moulding the ethnic mind.

How weighty this consideration becomes when we reflect that throughout historic times, that is, from the earliest dawn of civilisation, the subspecies of man have ever been as clearly contrasted in every feature as they are to-day ! The oldest monuments of Egypt and Assyria show their portraits as typical

as if carved or painted yesterday. No boreal fountain can wash the Ethiopian white; no kisses of tropical Phœbus could turn Cleopatra black.

We are constrained to adopt, therefore, the principle formulated by Orgeas, that, so far as history knows, "the races of men have never altered their traits except through intermarriage."

The physical criteria of race, such as the colour of the skin, the hair, the shape of the skull, the odour of the glands, are well marked in the gross. I have examined their relative values for purposes of classification in another work, and need not repeat the details here. But the question is pertinent: Are there psychological distinctions separating the subspecies of man as clearly as those of his physical economy?

Conflicting answers have been and still are offered to this inquiry. By some the mental powers of the races are asserted to be as sharply contrasted as their personal appearance, and the gulf between them to be practically impassable.

I have already said that nothing in the minute or gross anatomy of the brain can be offered to support this view. The contributions to the general culture of the species have been markedly unequal; but may not this be explained by other reasons than inherent physical inequalities?

I have already expressed the opinion that human groups have differed less in inherent psychical capacity than in stimuli and opportunities. Such, also, is the belief of that profound student of human development, Professor Bastian. He claims that convincing evidence in favour of such a view can be drawn from the uniformity in the development of thoughts, inventions, customs, religions, and the other elements of culture the world over, up to a certain point at which other intercurrent influences entered, not dependent on race distinctions.

After a prolonged study of primitive peoples the anthropologist Waitz reached the conclusion that there is not and never was any positive difference in the intellectual power of races; and the historian Buckle, reviewing the record of the species in time, announced his conviction that "the natural faculties of man have made no progress."

In abundant instances the children of savage parents have been brought up in civilised surroundings and have shown themselves equal and occasionally superior to their comrades of the so-called higher race in all the tastes of cultured society. It were useless, therefore, to talk of an average natural inferiority.

The attainment of a possible average, therefore, must be conceded. But this must not be construed as closing the question historically or psychically.

It is constantly observed in education that children of equal ability are by no means equally good scholars. They respond differently to the stimulus of the desire of knowledge.

Such contrasts are witnessed in races also, and, apart from whatever other influences we may name, are hereditary characteristics, recurring indefinitely and controlling the racial mind, its activities and its ambitions.

So visible are the mental differences of races that some writers have advocated a psychological classification in anthropology. Professor Letourneau has attempted it in one of his many treatises.

Pathology.—But it is not sufficient in this study of racial psychology to recount what a race has done and left undone in the work of the world. We must also turn a gloomier page and take into account the pathological mental symptoms it betrays ; for these may be indicative of a disease so deep seated and so fatal that the doom of the race is inevitable. When we see whole peoples dying out, not through external violence, but through some internal lack of vital force or adaptability, as in the instances of the Tasmanians, Australians, Polynesians, and American Indians, we may be sure that either in mind or body they are the victims of some deep-seated, fatal disease.

Most writers, treating the subject superficially, have

sought for the cause of the decline and destruction of peoples in the decay of their institutions, in the immorality of their lives, in their apathy to danger, or in the loss of their ambitions. These are but symptoms of the mental or physical malady which, "mining all within, infects unseen." They are the results of the incurable ailment which is hurrying them to destruction. Dr. Orgeas is right in his contention that "the pathological characteristics of peoples have played leading parts in the grand dramas of history, though they have too often escaped the observation of historians."

It finds its expressions in such phenomena as Ratzel enumerates as the cause of the deaths of peoples—restlessness, indifference to life, debauchery, infanticide, murder, cannibalism, constant war, slavery, laziness. When these are carried to the extent of reducing the personal and numerical vigour of a tribe or race, it indicates that its intellect is awry, its mind is diseased.

Thus the ineradicable restlessness of the red race, which more than any other one trait has stood in the way of their self-culture, belongs in the pathology of their nervous system. As Dr. Buschan points out, and as I have elsewhere emphasised, they are especially subject to "diseases of excitement," contagious nervous disorders, leading to scenes of the wildest riot and tribal loss.

They share this pathological condition with the Malayo-Polynesian peoples of the Pacific island-world. Among them both we find numerous examples of that outbreak of homicidal mania called "running amuck" (properly *amok*), where the maniac rushes into a crowd, killing whom he can; a crowd, not of enemies, as in the "Berserkerwuth" of the Northmen, but of friends and relatives. The abandonment of both races to alcoholism and narcotics is an evidence of the same morbid nervous excitability. This is an inherited racial pathological tendency and is not to be measured by the mere prevalence of nervous diseases. These may arise from the increased strain on the neurons when the struggle for existence is intensified. The enfranchised blacks since they have been obliged to support themselves present a much larger percentage of brain and nerve disease; such maladies among the Jews of Europe are six times more frequent than among the Aryans; and certain forms, such as progressive paralysis, are unknown in any but the most civilised communities.

The immunity of races to disease, or its reverse, reacts powerfully on their mental life, leading in the latter case to discouragement and apathy, in the former to confidence and conquest.

Two of the most striking examples are measles and smallpox. In the white race, the former has become

merely one of the "diseases of children," exciting little alarm, and, against the latter, vaccination provides an efficient protection. Among native Polynesians and Americans the ravages of both have been so dreadful as not merely to decimate a population but to leave the survivors mentally prostrate and indifferent to life. To such an extent has this mental depression sometimes progressed that some tribes, as the Lenguas of La Plata, have decided on the self-destruction of their race, and destroyed all their children at birth.

The immunity of the white race to malignant measles is not due to any special power of resistance, but to well-known laws of natural selection in disease, and does not extend to many diseases. The Japanese are practically immune to scarlet fever, the black race to yellow fever, etc., and that all such exemptions react favourably on the ethnic mind cannot be doubted. Such immunity is strictly *cognatic*, a legacy of blood in the true physiological sense, the human cells having undergone changes by the repeated attacks of the disease germs resulting in practical indifference to their assaults.

Indirectly, the march of epidemics has often not only decided the fate of nations but worked remarkable changes in national character. A familiar and striking example is the result of the Black Death (bubonic typhus) in England in the reign of Edward III.

CHAPTER III

THE INFLUENCE OF THE SOCIAL ENVIRONMENT

AT the risk of needless repetition I again emphasise the fact that Ethnic Psychology, the group-mind, is a product of social relations, a result of aggregation, and cannot be fully explained by the processes of the individual mind. The resemblances between them are analogies, not homologies. They act and react, one on the other, with the force of independent psychic entities.

The general proposition to this effect I have laid down in the second chapter of Part I. Now I shall go more into detail and examine just what influences the ethnic mind brings to bear upon that of the individual to bring it into *rappor*t with itself, to make it conform to the mass, to expunge, in fact, all that is individual within it.

I have also briefly but sufficiently referred to the psychologic measures by which this is accomplished, such as imitation, opposition, and continuity, by which the anti-social instincts are curbed, but at the

same time originality and independence are also often crushed.

It remains to point out the exact instruments which the group-mind employs in this process and to estimate their relative force.

These may be classified under five headings : Language, Law, Religion, Occupation, and Social Relations. This is in the order of the influence which they generally exert on the individual mind, which influence is to be understood as reciprocal, the individual working most potently on the ethnic mind in the same order of instruments. It is true, however, that the relative potency of each of them varies considerably with the condition of culture. Let us briefly examine their several characteristics.

Language.—Of all bonds which unite men, none other is so strong as language. This, indeed, it is which first developed the human in man. I have shown that the one distinguishing trait which divides man from brute is his power of general conceptions under symbols. The word “language” provides the symbol. To form words is the necessary first step in reasoning ; to attach to words precise meanings, perfect connotations, is the main effort of all subsequent reasonings. Words are the storehouse of all knowledge ; they are the tools of the mind, by which all its constructions are framed.

Language is the involuntary product of the human intellect. The man speaks with like spontaneity as the dog barks or the bird sings ; but the brute's inarticulate cry expresses mere emotion, while the man's articulate sounds convey thought.

Language is a proof of man's original social nature. It is impossible to explain it as other than the action of a group. It is due directly to the need of others felt by each. The individual alone could never form a speech, and hence he could never clearly think ; for thought, for clearness, needs not only creation but expression. We never fully understand or fully believe, until another understands us and believes with us.

Hence, language is the most perfect example of ethnic psychical action. It is the product of the group, to which each individual of the group contributes his share, and which is the common property of all, reflecting at once the traits of the group and the relations of the individual to it.

Nor is language a merely temporary criterion of group-character. Conspicuously not. Nothing clings so tenaciously to us as our mother tongue. Religions may fade and institutions decay, we may change our clime and culture, but the tongue persists. It is passed from generation to generation, exceeding count. No heirloom is so cherished, no tradition so hoary.

By the Aryan tongues of modern Europe antiquaries have restored the mode of life of that primitive horde who spoke the ancestral speech of all the Indo-European peoples, now stretching in an unbroken line from Farther India to San Francisco. Unnoticed but indelible, the ethnic life of that horde left its impressions on its speech like the footsteps on geologic strata from which the palæontologists reconstruct the strange forms of extinct species.

As the individual can convey his thoughts, his personality to the group, in the language of the group, he is confined and limited by that language. Hence the sovereign necessity in this investigation to study not merely the contents of a tongue, its verbal richness and resources, but that subtler side of it, its form or morphology. Indeed, the highest aim of linguistic science, of the *philosophy* of language, is to estimate the influences of the various forms of speech not merely on the expression, but on the formation of ideas. We think in words and in grammatical relations, and both should be logical and accurate if our expressed results shall be so also.

Few but specialists are aware how widely the varieties of human speech differ in the power they exert of this formative character. Suppose that in English we could not speak of that "divine tool," the hand, except as a bodily member belonging to some

particular person, "my hand" or "John's hand"; how it would crush all means of generalisation, shut in our minds to present and local cases! Yet this is the case in hundreds of American and some Asiatic dialects, not only with this but many classes of concepts. How are we to convey the simplest arithmetical relations to tribes who have no words for integers beyond 5? What is more hopeless, how can a member of such a tribe ever become an arithmetician of his own effort?

Thus an individual is a mental slave to the tongue he speaks. Virtually, it fixes the limits of his intellectual life. His most violent efforts cannot transcend them. Here the group, the ethnic mind exercises tyrannical sway over him.

So also do the contents of his tongue. I mean by this that incalculable potency broadly called literature, spoken or written,—the oratory, romance, poetry, philosophy, history, and science,—which is his daily mental food all the years of his conscious life. In this maelstrom of the opinions of others, his own individuality is generally submerged; he loses it in the struggle, and his own talk becomes but the echo of that of others of the group.

Law.—Writers who imagine that Law is a product of Culture are singularly off the track. Nowhere are its prescriptions more definite, its violation more

abhorred, or its penalties more inflexibly enforced than in the lowest depths of savagery. There the punishment is known and leniency unknown. When the Australian black has broken the unwritten law of his tribe, he has but two alternatives,—disappearance forever or death. After accepting the latter, or when seized in his flight, he quietly digs his own grave and, sitting in it, awaits the spears of his tribesmen.

So the “totemic” bond, the earliest form of permanent grouping in many families of mankind, whether based on religious or consanguine ties, invariably presents a compact and minute system of restrictions on individual liberty. They are, indeed, often carried to such an extent as to destroy all sense of personal responsibility or conscience, and to limit independence of action to the most trivial details of life. In them, through the recognised power of law, the group is everything, the individual nothing. Hence, they preserve but do not progress ; for I cannot too often repeat the fundamental distinction between the group-mind and the individual mind : that the former is active and preservative, while the latter alone is creative and progressive.

By the general term “Law” I mean that restraint exercised by the group on the individual which in its last recourse is backed by physical force. It makes no difference whether the sentiment of the group is

laid down by the High Chancellor in his ermine or by "Judge Lynch" in his shirt-sleeves; nor whether the group is the House of Lords or a gang of thieves, the underlying principle — that of the forcible constraint of the individual by the community — remains the same. To borrow Blackstone's definition, it is the "rule of conduct" which the group chooses to establish for its own ends. Law, therefore, is essentially a part of the ethnic mind, not conceivable except as a group-product, and if at times, apparently, the expression of one mouth (autocracy), yet voluntarily accepted by the group.

The body of concrete laws developed in a community, whether under conditions of freedom or restraint, constitute its government. Under either condition, the government is rightly regarded as the most significant product of the ethnic mind as revealing, educating, and moulding ethnic or national character. For any permanently accepted government, though it may have been instituted by force, must be mainly in unison with the ethnic traits.

The law stretches its hand over all the activities of the individual, mental or physical, fostering some and repressing others, marking the limit to all. Personal actions, the acquisition of property, the expression of opinions, all are by common consent of every community absolutely subjected to the ethnic mind, the

will of the group, and the physical power of the group stands ready to compel obedience to this will.

Distinctly the ethnic and not the individual will; for in laws we have frequent examples of the contrast between the two, when no individual approves a law which all approve. There is not an American writer who would be willing to have the expression of his thoughts gagged by government; and not one but approves of the law of libel.

In no relation of human life has the influence of law as a moulder of ethnic mental unity been more observable from earliest times than in that of Marriage.

It is my own opinion, based on a long study of the subject, that physical fidelity, *la fidélité du corps*, as Manon Lescaut expressed it, of either sex to the other never was, and is not now, what is termed a "natural" trait of human character. The native desire for sexual variety is equally strong in both sexes and has been so from the beginning.

Marriage laws, it should be borne in mind, have been everywhere and in all time framed by the males alone, and they all reveal the intention of the framers to preserve a right of property in the female, to limit her sexual freedom, while their own remains unrestricted.

Collateral interests, such as the extent of the food-

supply, the rules of transmission of property, the purity of castes or classes, and the like, have frequently entered into the bearing of marriage laws ; but the first and continued aim remains the prevention of feminine infidelity and the retention of masculine independence.

For this reason, the woman, even in the most advanced states to-day, is deprived of civic rights and kept in economic dependence ; she is allowed no part in either the making or the execution of the laws, and her position is ranked with that of minors or adults of undeveloped minds.

Government, therefore, with few exceptions, differs from language in this, that it is the exclusive production of the male ethnic mind, and must be considered to express the masculine traits only.

The form of marriage intimately affects two questions of prime importance in ethnic psychology : that of purity or intermixture of blood, and that of the permanence of the group.

In an earlier chapter I have emphasised the results of close and of mixed breeding in man as one of the controlling factors of his advancement. It is obvious that the forms of marriage called endogamous, where the only recognised marriages are within the clan ; monogamous, where there is but one wife ; and "preferential" polygamous, where there are

several wives, but the children of one only are recognised as legitimate, greatly favour close breeding.

General polygamous marriages, on the other hand, lead infallibly to intermixture of stocks and the enfeeblement of the higher in its mental capacity.

Not less do these laws affect the permanence of the group. This depends directly on the amount of property it has, and its ability to keep it.

In any form of communal marriage the property descends in common and belongs to the clan or consanguine group. There is no stimulus to the individual to augment it, as he gains nothing for himself. Hence, such marriages early fell into disuse.

General polygamous marriages are scarcely less fatal. Equal rights of inheritance between the offspring of several mothers lead to dissipation of the inheritance and to family feuds in the division. This is conspicuously true of inherited dignities and power. In history no polygamous nation has long survived the internecine feuds between the many heirs to the throne. The Sultan is safe only when all his brothers are murdered.

The marriage laws powerfully influence the ethnic mind in another direction, heavily fraught with weal or woe for its destiny; that is, in the respect for woman as a sex, in the honour shown her, in the sentiment of chivalry.

This is a true ethnic sentiment, quite apart from personal affection or romantic love. It reflects the position of woman in the group, not in the family, and reflects the feelings of the individual mind toward woman as a sex, as a part of the general group.

If we regard culture as the full development of the sentiment and emotions, as well as the intellectual faculties of a community, then I know no one criterion which will measure its degrees more accurately than the prevailing opinion about woman, her place and her dues.

Where the laws make her distinctly dependent and inferior, where, in marriage, she becomes more or less the property of her husband or the mere instrument of his passion, it is impossible that the general sense of the community can regard her with high esteem. This is the case in all polygamous nations.

The chivalry of the Middle Ages was the direct consequence of the inflexible monogamy commanded by the Church.

Closely related to these influences are those of celibacy and divorce as sanctioned by law.

By "Occupation" in ethnology is meant that aim to which the individual devotes most of his time, thoughts, and energies.

It does not necessarily mean to "work" or to gain

a livelihood. In many cases it is mere amusement or a routine of social customs, or, like the beggar, sitting still and asking alms.

Whatever aim it acknowledges, the occupation is one of the most direct and potent agencies in the formation of character, individual and national; in Shakespeare's phrase, "almost the nature is subdued to what it works in, like the dyer's hand."

Some ethnographers have selected the prevailing occupations as the best of all tests to distinguish the grades of man's cultural advance. They have divided his progress into a hunting, a pastoral, an agricultural, and a commercial stage. Much may be said in favour of such a division. At any rate, it indicates the close connection between human life in the aggregate and individual avocation.

It is certain that the man or the group who have to devote their whole energies to obtain the necessities of existence must advance very slowly or not at all in the intellectual life. This partly explains the stationary culture of the Australian black and the native of our arid western plains.

But it does not follow, as some theorists would have us believe, that leisure, the non-necessity of work, in itself favours progress. The reverse is the case. The Polynesians, for whom nature's harvests were ample, were as low as, often lower than, the Aus-

tralian. Nothing favours progress but ordered industry directed toward a distant purpose.

The manner in which occupations, therefore, modify the ethnic mind varies with the character and aims of the occupations. The first distinction may be drawn in the degree in which they favour social intercourse, and thus promote the unity of the group. In this respect agriculture holds a low place. The unprogressive character of farming communities is notorious. The contrast of the adjectives rustic and urbane shows it to be an observation of ancient date. The cause lies chiefly in the isolation of the farmer, and the suspicion and jealousy with which he usually regards his nearest neighbours.

Another cause lies deeper and is of general value. Where there is but one prevailing occupation, where all men's thoughts and energies are directed along the same lines to the same ends, there can be little social advance. For the best results to the group the movements of individual activities should be in intersecting, not in parallel lines. This is the main secret of the superiority of city life, in spite of its many drawbacks.

The respect, or lack of it, with which a community regards occupations is a marked trait of ethnic psychology, and reacts powerfully on the position and destiny of the nation.

In England, commerce, "trade," is widely regarded as somewhat degrading. Yet were she to lose her trade she would promptly sink to a fourth-class power—an illustration of what I have before remarked, that a sentiment of the group-mind may not be that of the individuals of the group.

The vocation of arms is regarded in modern Europe with admiration, but in China with disrespect; the results of which have proved that the Chinese, if correct, are far ahead of their time.

The veneration of the priestly office has coloured the thoughts and written the fate of many a nation; and there is no lack of examples to-day where their oracles close the ethnic mind to the admission of verifiable knowledge and the results of science.

The disrespect for occupations beneficial to the group is an invariable proof of low intelligence in the ethnic mind. The result of such a sentiment is anti-social and weakens the power of the group as a unit, by promoting divisions and opposition among its members.

The extreme of this is seen in the system of castes, rigidly carried out, as in India, and resulting everywhere in national impotence and ethnic dissociation. The former system of feudal aristocracy in Europe was little better, and led to civil wars, the fruits of national disunity.

National unity, to be of the highest type, must be based on equal respect for every man's employment, if that employment is of advantage to the community.

By confining the exercise of certain highly honoured occupations to so-called "privileged" classes, a heavy blow is dealt at the unity of the ethnic mind. Class jealousy and party antagonism are developed, followed by a corresponding weakening of the national force. Modern democracy fully recognises this danger, but has been unable to remove it under the guise of nepotism and succession in office.

It need hardly be added that where there exists a recognised distinction between owners and slaves, or between a "ruling" and a "subject" class, unity of group sentiment or thought is out of the question.

Yet, in modern life strenuous exertions are frequent to insist on a distinction of the occupations of men and women, based, not on capacity or opportunity, but on the fact of sex alone, the general effort being to confine women to "menial" or mechanical occupations only.

The philosophical ethnologist can see in this nothing but the near-sighted effort of the strong to oppress the weak, unaware of its sure recoil on themselves. In reducing the influence of woman, exerted through beneficial activities, the *ethnos*

directly diminishes the elements of its own advancement. Goethe never wrote a deeper truth than in his famous lines :

Das ewig weibliche,
Zieht uns hinan.

And the ethnic psychologist has no sounder maxim than that uttered by Steinthal : "The position of woman is the cardinal point of all social relations."

The ethnic psychologist has a wide field in the study of the influence of particular occupations on the minds of those engaged in them, and thereafter on the mind of the group. He will have to examine the assertion that some, though necessary, are in themselves deteriorating to the better elements of humanity. Can the slaughter of men in war be carried on without brutalising the sentiments? Can commerce be successfully conducted without deception? Can the advocate do his best for the guilty client without impairing his sentiment of truthfulness?

Further subjects of study must be the influence of occupations on home and family life. Many involve travel, enforced absences, or a migratory career, weakening such ties.

A marked tendency of modern occupations is toward increased specialisation. A man will spend his life, it has been said, in making the ninth part of a pin; and it has been asked, with accents of

despair, what hope for the mental growth of such a case? Yet, in fact, the lawyer confined to his local code, or the medical specialist to the diseases of one organ, has the horizon of his daily labour as narrowly circumscribed.

The truth is that the individual is in the position of the primitive tribe. If he is forced to give all his waking hours to "getting a living," it matters little what his employment is. One is as bad as another. And if by his work he wins leisure, all depends on the use of that leisure. Spinoza gained his bread by grinding optical glasses,—surely an uninspiring mechanical drudgery! But in odd times he wrote his *Ethics*, than which no nobler contribution to the highest realms of thought has ever been composed.

CHAPTER IV

THE INFLUENCE OF THE GEOGRAPHIC ENVIRONMENT

THE extent to which the geographic environment decides the character and history of a people has been and still is a question on which competent writers differ widely.

On the one side we have such writers as Draper, Menschikoff, von Ihering, Ratzel, and generally the Russian and English schools, who seek in climate, soil, and waterways the explanation of the whole of history. Their views may be summed up in the maxim of von Ihering, "The soil is the Nation."

In contrast to them stand the pure psychologists, notably the French school, who refuse to admit any great or lasting power of the material surroundings on the psychical traits. These, they claim, are to be looked for in race and in permanent anatomical differences, persisting in all climes and spots. They would say with the philosopher Hegel: "Tell me not of the inspiration of Ionian skies! Have they

not for a thousand years spread their beauties in vain before degenerate eyes?"

The latter party, however, by no means insist that the environment is indifferent. They would entirely agree with Professor Wundt, that purely psychological laws are inadequate to explain the events of history, and that we must constantly take into account the associated physical conditions in order correctly to tell the story of human development. They would not deny that in some remote and invisible past the racial mind, like the racial anatomy, must have absorbed its permanent characteristics from local impressions; but this once accomplished, they would argue, both orders of characteristics became ineffaceable.

Even the most determined of the "anthropo-geographers" will not deny that the power over the mind which they attribute to geographical features diminishes in proportion as culture increases, to the extent that it is no longer coercive in civilised life. Nor can anyone who reflects be blind to the fact that the sameness brought about by subjection to given geographical conditions is something very different from the unity produced by mental association.

The decision of this debated question presents itself to me in a light which I have not seen stated by previous writers.

Both parties are right. We must agree with Hegel that the most lovely and advantageous spots on earth fail to develop their inhabitants ; and yet, where such development takes place, we can always point to the geographic conditions which have alone rendered it possible.

In reality, the question is one only indirectly of geography. It belongs, directly, in quite another department of research, that of Economics, the science of the production and distribution of material wealth.

No matter how fertile the soil, how inviting the waterways, how smiling the skies, man will remain amid it all the savage of the prime unless he have within him the psychical stimulus to make use of these for the increase of his wealth ; and that stimulus comes not from without.

Material wealth is as much a condition of mental growth as is bodily nutrition, but is just as far as is the latter from being either a synonym or a measure of such growth. It is a prerequisite, not a correlate.

The application of this principle explains the discrepant facts which have led to the conflict of opinions in anthropo-geography. Without geographic facilities, a nation cannot become wealthy ; and without wealth it is even more at a disadvantage than the individual.

Poverty and riches are what most influence the fate of men and nations.

Armuth ist die grösste Plage,
Reichthum ist das höchste Gut.

GOETHE.

Life itself is a question not merely of means, but of ample means. In central England the rich have an average longevity of forty-nine years, the poor but twenty-five years; in Berlin the rich live fifty years, and the poor thirty-two years (Farr, Kolb).

The higher culture, anything above the mere fight for life, can find a place only when it is possible, through accumulated wealth, to call a truce in that fight. The leisure so obtained may not be, generally is not, employed to that higher end; but without it the effort remains impossible.

Anthropo-geography, therefore, is primarily a branch of economics, not of ethnology. It affects the ethnic mind only indirectly, and not at all through the action of any laws of its own. It is a vital factor in the production of tribal or national wealth, but in no way influences the use which the tribe or nation may make of that wealth; while this is the only question with which the ethnologist or the historian of human culture is primarily concerned.

With this perfectly clear understanding on the real bearings of the much-talked-of "geographic environment," I shall proceed to review its leading divisions. Such a conclusion will not be favoured by those

writers who teach that the surroundings exert in some manner an inspiring or a depressing effect on the mind, and that this reflects itself in the ethnic character. What ! they will exclaim ; are we to count for nothing the sweet meads, the sparkling waters, the glory of the landscape, and the hues of the flowers ? The grandeur of the forest, the sublimity of beetling crags, the solemn expanse of the ocean,— are these of no avail in impressing the souls that see them with exalted aspirations and fervently stimulating the imagination ?—

Alas ! “ The hand of little use has the daintier touch,” and lifelong familiarity with the most beautiful scenes of nature reduces to zero the stimulus which they are capable of yielding to others.

Wordsworth held the other view and could sing :

The thought of death sits easy on the man
Who has been born and dies among the mountains.

But it is obvious, on reading the note in which he explains the source of his observation, that it was their social culture, not their local habitation, which imparted this seeming indifference to the peasantry. Precisely the same indifference to death among their congeners in France was noted long before by Montaigne.

There are three chief economic factors, derived from geographic surroundings, which decide the

material welfare of a human group on any part of the earth's surface. They are :

- 1.—The distribution of the surface land and water.
- 2.—The character of the soil with reference to productiveness, in the mineral, floral, and faunal realms.
- 3.—Its salubrity for man.

These favour or oppose the three essential desiderata for human progress, to wit :

- 1.—Intercommunication.
- 2.—Abundant nutrition and materials for the arts.
- 3.—Bodily health.

The Distribution of Land and Water.—The Iroquois Indians call the peace-belt of wampum which is exchanged between friendly tribes a “river,” because it unites, as does some smooth watercourse, those living apart. This is a sweet native tribute to the influence of navigable streams in bringing man into relation to man. Bays, fiords, and harbours permitted man with frail early craft to keep along the seashore for thousands of miles. Thus the Tupis migrated from the river La Plata to beyond the mouth of the Amazon and far up that stream ; while, antedating history, the Mediterranean peoples dared the stormy Iberian coast to visit the remote Caspiterides and the boreal isles of Thule.

The Delaware Indians expressed their relationship

among themselves by saying, "We drink the same water," meaning that they all dwelt on the Delaware River and its tributaries. Thus watersheds, through the facility of intercourse they offered, became natural national areas, and developed unity of thought and feeling.

Lake-districts exerted a like influence and became not only strongholds by their pile dwellings, but centres of tribal unity. When Cortes reached the valley of Mexico he found the shores of the lake occupied by three nations, independent but closely federated for offence and defence.

These are examples of the unifying powers of the watery elements; but in its might as a torrential stream or as "the unplumbed, salt, estranging sea," it severs the families of men with a no less stringent potency. No more striking example can be offered than that of the American race, the so-called "Indians" of our continent. They extended over the whole area from the austral to the boreal oceans, a race-unit, identical in anatomical traits, but absolutely isolated from the rest of mankind, not a trace of European, Asiatic, or Polynesian influence in their languages or cultures.

The land areas offer obstacles more frequently than facilities to tribal intercommunication. Mountain chains, deserts, steppes, vast swamps, dense for-

ests, and tangled jungles isolated by formidable barriers the early hordes, leaving them to battle singly with the difficulties of existence. The Roman writers say that interpreters for seventy different languages were needed in the Caucasus, and de Leon pretends that in the mountains of Ecuador there were as many tongues as there were villages. That Egyptian and Babylonian civilisation flourished contemporaneously for five thousand years without either colouring the other is explained by the trackless and arid desert which lay between them.

Differences in mere *area*, a matter of square miles, materially modify the ethnic mind. Great men are not born in small islands. The less the area of a state, the less the variety of its life, the fewer the stimuli to thought and emotion, the narrower the range of observation. The ethnographer Gerland attributes the mental degeneracy of the Polynesians, compared to their cognates, the Malays, directly to the much smaller islands which they were obliged to inhabit.

Mere *number* acts in a similar manner on the *psyche*. A nation of many millions has greater self-confidence; each citizen feels its power strengthening his own courage, his faith is firmer in what so many believe, and he is the readier to labour for aims which so many admire.

The relation of the area to the number yields the *density* of the population, which, with its collateral condition of *distribution*, is a ruling factor in ethnic life.

I have placed the geographic features which favour or impede intercommunication first on the list of those which modify the ethnic mind; and designedly so.

In the philosophic study of human development the social and antisocial factors demand our first attention. A man becomes man only as one of many. Nothing so lames progress as isolation; nothing so hastens it as good company; and I am fain to endorse the proverb that bad company is better than none. Rapid transportation is the key to the phenomenal growth of the nineteenth century: transportation of weight by steam, of thought by electricity. The Romans knew the value of good roads and made the best which have ever been constructed; the Phœnicians and Greeks won their pre-eminence, not by the resources of their home provinces, but by their skill as sailors.

The Soil.—Next and second in deciding the history and character of a people comes the nature of the soil, the earth, on which they live.

Its value is to them in what it yields, either spontaneously or by labour. The primitive man contented

himself with the former; but culture came along when toil entered. For culture ever demands an effort greater than that immediately necessary for existence, because its aim, from first to last, is directed to the future; and the higher the culture, the more distant is that future.

Even the earliest men levied tribute on all the realms of nature. The cave-dwellers of the Gironde caught fishes and trapped beasts; they gathered nuts and edible roots; and they sought diligently for the stones best adapted to lance-points and scrapers. All this we know from the remains left in their rock-shelters. They utilised the soil to the full extent of their knowledge and wants.

The wealth they thus amassed was scanty and transitory; but when their successors, the neolithic peoples, appeared with domesticated animals, an agriculture, a beginning of sedentary life and city building, and, ere long, devised the excavation of ores wherewith to fashion weapons of bronze, the land-areas suitable for these occupations soon became the centres of ethnic life and property.

I need not pursue the story of the growth of these prime industries: the cultivation of the soil, the domestication of animals, the exploitation of mines, the transformation from a wandering to a sedentary life, from vagabondage to the hallowed associations

of a home, and the effects which these changes wrought on the sentiments and intellects of tribes.

What I wish particularly to point out is that what man asks from the soil is primarily nutrition,—only nutrition, a living. It is the “food-quest” which has been so vividly portrayed in American primitive life by Mindeleff and so fully set forth by Mason: the tribe enslaved by the soil; its laws, religion, customs, hopes, and fears wrapped up and submerged in the desperate strife for food. Only where there is a surplus, where wealth rises above want, is it possible for the group to free itself from this bondage to the clod,—to become more than an “adscript of the glebe.”

The relations between man and the fauna and flora of the region he inhabits are constant and intimate. The progress of civilisation has been traced by Pickering and others in the distribution of plants cultivated by man for his food, use, or pleasure. They have been rightly named by Gerland “the levers of his elevation.” Especially the cereals supplied him a regular, appropriate, and sufficient nutrition. Their product was not perishable, like fruit, but could be stored against the season of cold and want. Their cultivation led to a sedentary life, to the clearing and tillage of the soil, to its irrigation, and to the study of the seasons and their changes.

The grain, once harvested, still required prepara-

tion to become an acceptable article of food. It must be soaked or crushed and in some way cooked. These processes stimulated inventive ingenuity, encouraged regular labour, and required specialisation of employment.

In the hunting and fishing stage of culture the fauna supplies the chief articles of food. To obtain it was man's earliest school of thought. He had to surpass the deer in swiftness and the lion in strength, or devise means to circumvent them. We find the early cave-men had accomplished as much. They prepared pitfalls for the mammoth, traps for the sabre-toothed tiger, foils for the fleet reindeer, and did not hesitate to encounter even the formidable rhinoceros. Nets, hooks, and fishing-gear were thought out with which to lure and ensnare the denizens of the streams.

But a far more rapid advance in his culture condition came about when man bent his energies to the preservation, not to the destruction, of the lower animals. By the process of domestication he secured not only an abundant supply of food in their milk and flesh, but beasts of burden and draught, facilitating rapid intercourse and enabling him to conquer more rapidly the nature around him.

The mental growth of many peoples has been inseparably linked to a single animal. Thus the Tartars

of the steppes have their horses, the Todas their cows, the Tuaregs their camels, without which their social organisations would be wholly lost.

The absence in America of any indigenous animal suited for burden or draught which could be domesticated was one of the fatal flaws in the ancient culture of the continent, drawing a line beyond which progress in many directions became impossible.

Salubrity.—By salubrity I mean the general tendency of a locality to maintain the normal functions of the body.

This depends chiefly on what is included in the term "climate," for soils become unhealthy only through the action of climatic conditions. These may be classed under three headings :

1. Temperature, which considers both the actual amount of heat and also the rapidity or extent of its variations (the "range").

2. Moisture, including rain- and snow-fall and the average humidity.

3. Variety, not merely in the two conditions above mentioned, but of seasons, winds, clouds, electricity, etc.

The last-mentioned has been too frequently overlooked or underrated by medical and ethnographic geographers. In reality, it is the most potent of the three in its results on the human body and mind. It

is easy to show that it is not the extreme of heat or cold which acts injuriously on the system, but the continuance of the temperature. A climate with a marked seasonal contrast between summer and winter is confessedly more invigorating than one, no matter how delightful, which is practically the same from year-end to year-end.

To keep in health, to maintain the functions in their highest relative activity, is the condition of the most effective work. Neither the individual nor the ethnic mind can reach its best results unless the body is in a healthful condition. Hence, those localities which are prone to endemic diseases or to frequent epidemics can never maintain a population intellectually equal to spots more favoured in this respect.

The most marked and widespread of the endemic poisons is *malaria*, the result of a paludal germ which has not yet been isolated. Heat and moisture are requisite to its development, and immunity from it is unknown in any race.

Malaria is the curse of plains and lowlands, while mountainous regions have almost the monopoly of goitre and cretinism. These endemic maladies directly diminish the mental powers through disturbing the circulation of the brain. They contribute largely to the inferior intellectual status of mountaineers, already prepared by the isolation of their lives.

The most important ethnic question in connection with climate is that of the possibility of a race adapting itself to climatic conditions widely different from those to which it has been accustomed. This is the question of Acclimatisation.

Its bearings on ethnic psychology can be made at once evident by posing a few practical inquiries : Can the English people flourish in India ? Will the French colonise successfully the Sudan ? Have the Europeans lost or gained in power by their migration to the United States ? Can the white or any other race ultimately become the sole residents of the globe ?

It will be seen that on the answers to such questions depends the destiny of races and the consequences to the species of the facilities of transportation offered by modern inventions. The subject has therefore received the careful study of medical geographers and statisticians.

I can give but a brief statement of their conclusions. They are to the effect, first, that when the migration takes place along approximately the same isothermal lines, the changes in the system are slight ; but as the mean annual temperature rises, the body becomes increasingly unable to resist its deleterious action until a difference of 18° F. is reached, at which continued existence of the more northern race becomes impossible.

They suffer from a chemical change in the condition of the blood-cells, leading to anæmia in the individual and to extinction of the lineage in the third generation.

This is the general law of the relation to race and climate. Like most laws, it has its exceptions, depending on special conditions. A stock which has long been accustomed to change of climate adapts itself to any with greater facility. This explains the singular readiness of the Jews to settle and flourish in all zones. For a similar reason a people who at home are accustomed to a climate of wide and sudden changes, like that of the eastern United States, supports others with less loss of power than the average.

A locality may be extremely hot, but unusually free from other malefic influences, being dry, with regular and moderate winds, and well drained, such as certain areas between the Red Sea and the Nile, which are also quite salubrious.

Finally, certain individuals and certain families, owing to some fortunate power of resistance which we cannot explain, acclimate successfully where their companions perish. Most of the instances of alleged successful acclimatisation of Europeans in the tropics are due to such exceptions, the far greater number of the victims being left out of the count.

If these alleged successful cases, or that of the

Jews or Arabs, be closely examined, it will almost surely be discovered that another physiological element has been active in bringing about acclimatisation, and that is the mingling of blood with the native race. In the American tropics the Spaniards have survived for four centuries; but how many of the *Ladinos* can truthfully claim an unmixed descent? In Guatemala, for example, says a close observer, *not any*. The Jews of the Malabar coast have actually become black, and so has also in Africa many an Arab claiming direct descent from the Prophet himself.

But along with this process of adaptation by amalgamation comes unquestionably a lowering of the mental vitality of the higher race. That is the price it has to pay for the privilege of survival under the new conditions. But, in conformity to the principles already laid down as accepted by all anthropologists, such a lowering must correspond to a degeneration in the highest grades of structure, the brain-cells.

We are forced, therefore, to reach the decision that the human species attains its highest development only under moderate conditions of heat, such as prevail in the temperate zones (an annual mean of 8° - 12° C.); and the more startling conclusion that the races now native to the polar and tropical areas are distinctly *pathological*, are types of de-

generacy, having forfeited their highest physiological elements in order to purchase immunity from the unfavourable climatic conditions to which they are subject. We must agree with a French writer, that "man is not cosmopolitan," and if he insists on becoming a "citizen of the world" he is taxed heavily in his best estate for his presumption.

The inferences in racial psychology which follow this opinion are too evident to require detailed mention. Natural selection has fitted the Eskimo and the Sudanese for their respective abodes, but it has been by the process of regressive evolution; progressive evolution in man has confined itself to less extreme climatic areas.

The facts of acclimatisation stand in close connection with another doctrine in anthropology which is interesting for my theme, that of "ethno-geographic provinces." Alexander von Humboldt seems to have been the first to give expression to this system of human grouping, and it has been diligently cultivated by his disciple, Professor Bastian.

It rests upon the application to the human species of two general principles recognised as true in zoölogy and botany. The one is, that every organism is directly dependent on its environment (*the milieu*), action and reaction going on constantly between them; the other is, that no two faunal or

floral regions are of equal rank in their capacity for the development of a given type of organism.

The features which distinguish one ethno-geographic province from another are chiefly, according to Bastian, meteorological, and they permit, he claims, a much closer division of human groups than the general continental areas which give us an African, a European, and an American subspecies.

It is possible that more extended researches may enable ethnographers to map out, in this sense, the distribution of our species; but the secular alterations in meteorologic conditions, combined with the migratory habits of most early communities, must greatly interfere with a rigid application of these principles in ethnography.

The historic theory of "centres of civilisation" is allied to that of ethno-geographic provinces. The stock examples of such are familiar. The Babylonian plain, the valley of the Nile, in America the plateaux of Mexico and of Tiahuanuco are constantly quoted as such. The geographic advantages these situations offered,—a fertile soil, protection from enemies, domesticable plants, and a moderate climate,—are offered as reasons why an advanced culture rapidly developed in them, and from them extended over adjacent regions.

Without denying the advantages of such surround-

ings, the most recent researches in both hemispheres tend to reduce materially their influence. The cultures in question did not begin at one point and radiate from it, but arose simultaneously over wide areas, in different linguistic stocks, with slight connections; and only later, and secondarily, was it successfully concentrated by some one tribe,—by the agency, it is now believed, of cognatic rather than geographic aids.

Assyriologists no longer believe that Sumerian culture originated in the delta of the Euphrates, and Egyptologists look for the sources of the civilisation of the Nile valley among the Libyans; while in the New World not one, but seven stocks partook of the Aztec learning, and half a dozen contributed to that of the Incas. The prehistoric culture of Europe was not one of Carthaginians or Phœnicians, but was self-developed.

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